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International Journal of Home Economics

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Editorial

Issue 1, 2010

This is the first issue of the International Journal of Home Economics in 2010.There are two peer reviewed papers, book reviews and a reprint of an article from the IFHE Home Economics Congress 2008 in Lucerne, Switzerland.

It's hard to believe that already we're thinking about the next world congress. World Congress 2012, www.ifhe2012.org, in Melbourne, Australia supports the theme of Global creativity and innovation: Developing capacities for sustainable futures.

It was very good to see so many members at the recent IFHE Council meeting conference day in Sligo. I'm keen to include papers presented at the conference in an upcoming special issue of IJHE. We are planning to publish papers in one of the following categories:

- Refereed—where papers undergo a peer review process
- Non-refereed—where papers of acceptable standard are edited but do not undergo a peer review process

If you presented at Sligo, but have not received my invitation to submit in the special issue, please email me at this address: editor@ifhejournal.org for more information.

Publication in IJHE gives wide exposure to your work and adds to the professional literature base of our field. Theoretical papers, literature reviews, and a wide range of genres along with research papers, are accepted for publication in the journal.

Donna Pendergast, PhD
Editor, IJHE

International Journal of Home Economics

Home Economics in development through action research

Jette Benn

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Abstract

This research study aimed at describing and developing Home Economics education through an action research approach in grade 6 classes in two schools. The study went through three phases: an explorative phase with preliminary observations, interviews and discussions with teachers and pupils; a discursive phase during which changes were implemented in accordance with findings; and an explicative phase during which results were translated into text books for pupils in grades 4 to 7, and into a teachers' guide.

The subject is analysed theoretically through a model of the subject and research field. Findings and suggestions are discussed in relation to theories of learning, education and Home Economics. The overall objects were to involve pupils, to make them responsible through active and critical participation, and lastly to evaluate education in different ways.

Key words: Action research, developmental work, home economics education

Home Economics has a long tradition and rather definite ways of understanding and performing Home Economics education (Attar, 1993; Benn, 2000; Hjälmeskog, 2000; Pendergast, 2001; Brown, 1984). However, a fundamental circumstance of late modern times and globalization are changes to conditions for living together, working, and life experiences. In present times, there are also many ongoing changes within the educational field that are intended to have an impact on the school setting and curricula for the benefit of the pupils. Questions can be raised however, regarding the method by which such changes are implemented in teaching and education in schools. Teachers must change their old procedures and understand their subject in relation to the present time and the needs for the future. According to Ritchey (1989, p. 27).

> *'home economics has not experienced the intensity of research taken for granted in many disciplines. As a professional field, home economics has thought more about day-to-day problems that could be solved or alleviated partially through intuition, the application of experience, and/or through examples taken from similar practical situations.'*

One way to investigate methods of change is to initiate developmental work as action research within the classes. Such an approach is the focus of this article. In particular, this article focuses not on the specific content of the change, but on the methods used. For further perspectives on the content of this study, see Benn (2009).

A top-down approach from Ministry level to local school level will contribute to renewal. The overall documents, school Act and curriculum can be changed in writing, and general educational ideas can to a certain degree be forced into the school, but implementation and transfer of new theories, content and ideas concerning subjects, education and teaching must occur via a “bottom up” approach by teachers in cooperation with the pupils and can be supported by researchers in the field. That is, developmental work is used as a part of the action research. This article deals with methods of introducing a new curriculum, in this case Home Economics, to primary and lower secondary school. The aim is to find ways to involve pupils more, in order to empower them, to broaden the field of Home Economics and to relate it to everyday life of the 21st century.

Action research is, according to Elizabeth Hart and Meg Bond, aimed at improvement and involvement, it is problem focused, context specific and governed by participants (Hart & Bond, 1995). It is defined by Richard Sagor (2000, p. 3) as

> *‘a disciplined process of inquiry conducted by and for those taking the action. The primary reason for engaging in action research is to assist the “actor” in improving and/or refining his or her action.’*

These aims and parameters for action research were also overall goals for this study.

The aim of the research study was to address the following questions:

- What should it mean to be educated in Home Economics in a post- or late-modern world?
- How is it possible to improve education such that it reflects a broader understanding of Home Economics and to further learning?
- How could pupils be more involved in education and obtain action competence?

Further, the study aimed to address more in-depth questions, such as:

- How do we as professionals overcome or elaborate the theory-practice dilemma?
- How do pupils understand and experience the subject?
- What and how does the pupil learn through a practical approach?
- How do we improve learning conditions and circumstances and education within Home Economics education in a society in transition?
- How can a broader understanding be transferred into the school and the Home Economics education?

The Danish Home Economics curriculum has changed such that it emphasises a broader understanding of the field. This transformation is based upon changes in society, home and educational theories and in the Home Economics subject as such, as well as upon the findings of Home Economics research and educational studies within the country (Ministry of Education, 2009; Benn, 1996; Benn, Hjälmeskog, & Turrki, 1998; Benn, 2009). This new understanding has implications for teaching and education within school.

The research study was conducted by two researchers in cooperation with two Home Economics teachers and was part of a major program at The Royal Danish School of Educational Studies called: School Subjects, Learning and Education in the 21st. Century. Education in the meaning: Bildung. The project was conducted by Jette Benn and Annelise Terndrup Pedersen. The title of the study was Home Economics, Learning and Education within the 21st. Century. The methods used within study were mainly qualitative, and included classroom observations and interviews carried out with students aged 13–14 years in two 6th-form classes in two schools in the Danish 'folkeskole'(public school for Danish children aged 6–16 from kindergarten class to 9th or 10th grade). The research study used method pluralism, and can be seen as a sort of ethnographic study of two school cases followed by the action research approach, defined previously. The research study was carried out over two years.

The objective field of the research

To encompass the object field and focus for the research requires close examination of the subject and its context. Within Home Economics education, as in other school subjects, we have three involved elements: The teacher, the pupil and the subject. These elements can be represented in the inner part of a figure that was developed by the Danish music didactician Frede V. Nielsen in reference to music education, but that can be transferred to Home Economics:

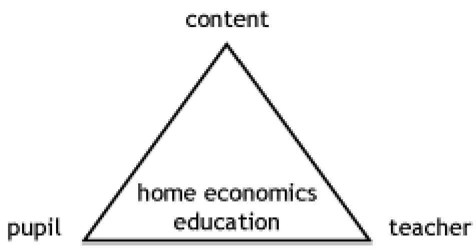

Figure 1: The research field of relations (from Nielsen, 1999)

The model shows that educational studies need to deal with the involved and related actors and parts: pupil, teacher and subject. But these parts are not the only elements of the "objective-field" for Home Economics research. Representation of the relationships between elements might give the impression that Home Economics education (or any education) is to be the same at all places, at all times and in all social environments. It might suggest that we have a "canon" to learn (the same "canon" at all times), which brings the pupil a classical, historic education. Nielsen has illustrated the whole field for educational research in the following Figure 2 but I have chosen to take the figure stepwise, from the centre to the full figure. The triangle showing the content-teacher-pupil relationships is embedded in a pentagon of five essential frame-giving dimensions: *Discourses, decisions* (School Act, curriculum, syllabus, etc), *institutions, external actors and economy*

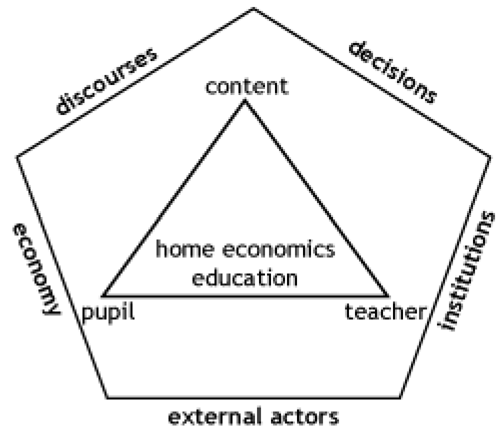

Figure 2: Part of the subject field for educational research (adapted from Nielsen, 1999, p. 36, translation Benn)

These figures illustrating the educational situation may be seen in different realities: *An intended reality, an observed reality, an experienced reality and a possible reality*. And finally they must be related to *the historical dimension and the geographical and socio-cultural dimension*. These dimensions are the links in time, place and social environment (Nielsen, 1999).

The full figure for the research subject-field can thus be illustrated as in Figure 3. The model does not suggest that we as researchers every time have to cover all parts of the field, but indicates that we must clarify and be aware of the different dimensions, realities, frames and parts having implications for the education process. To research the objective field we bring explicitly or implicitly our own perceptions of the teaching situation. We analyse it through the texts used in a wider understanding and/or non-verbal articulation or we focus on the meaning of the physical objects or environment, that is the equipment, tools (artefacts), and the room for the results of education. The geographical, socio-cultural, and historical dimensions and the different ways of viewing the reality is part of our research comprehension.

In this context, the education situation is the reality: a reality that is influenced by other realities, such as discourses, decisions, institutions, economy and external actors, and each of these realities might be a single research study. In these realities the Home Economics education is embedded: this relationship is the core of our research interest. The research interest can be directed towards specific dimensions, realities, or educational relations, but the model illustrates the whole “objective or object field” within educational research.

Another important aspect is the role of the researcher. She can choose to be an observer or a part of the changing, developing work in co-operation with the other involved parts, such as teachers and pupils, in a sort of action research. This was the case in this study.

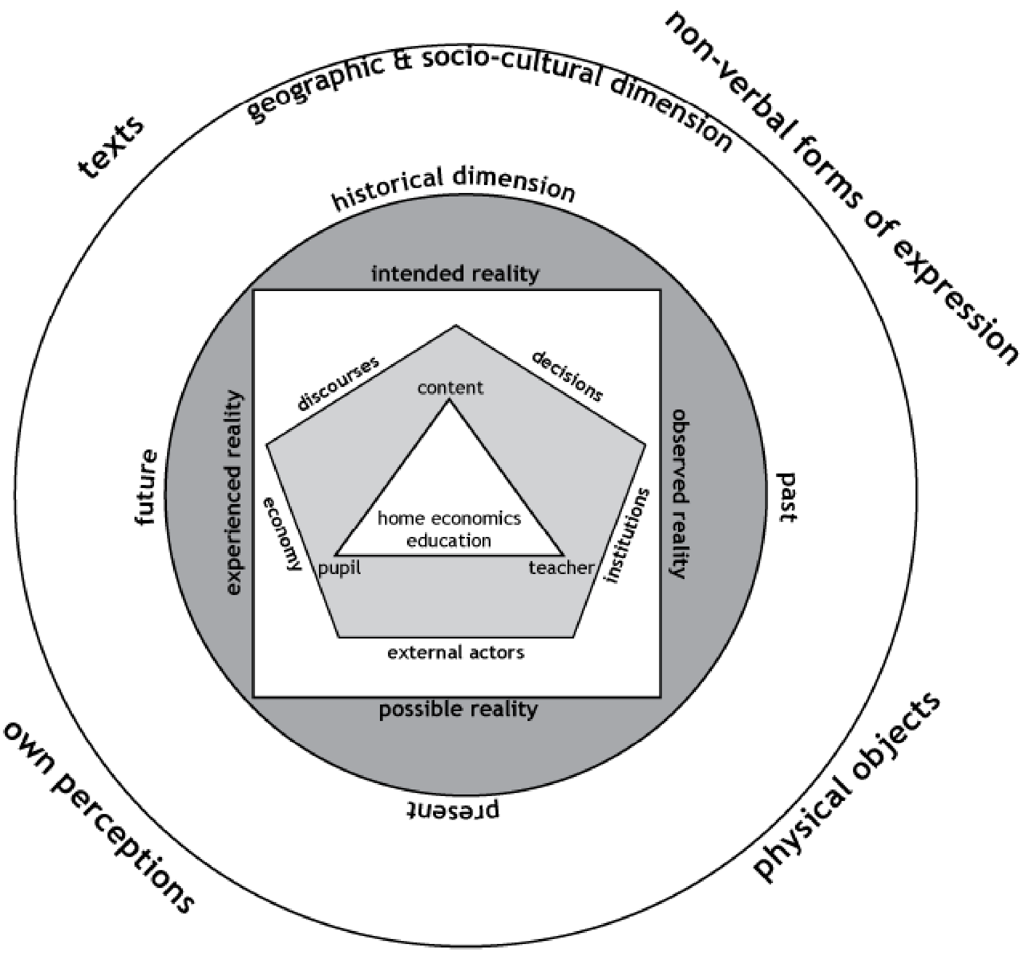

Figure 3: The territory of the home economics' research (adapted from: Nielsen, 1999, p. 36)

Home Economics in the Danish curriculum and school

The common understanding of Home Economics that influences the content of the subject and people's understanding of how to teach it has changed little over the last 100 years. Even the Home Economics classes are still held in the school kitchen. The theory used within the subject has mainly been natural science, nutrition and microbiology, and the content chosen to illustrate theory has mainly involved food, cooking, and health (Benn, 1996, 2007; Attar, 1990; Hjälmeskog, 2000). Home Economics is formally described through the school act, curriculum and syllabus as a compulsory subject taught in Denmark "at one or more forms between grades 4 to 7" (Ministry of Education, 2005) and as optional between grade 8 and 10 in the Danish "Folkeskole". Formal curricula are given for all school subjects. The Home Economics curriculum from 2009 defines the subject as having the aim that pupils

> *—through comprehensive learning processes acquire knowledges and skills so that they become able to act in their own lives. The pupils shall acquire practical skills, aesthetic experiences and understanding of own food culture and that of others, of the correlation of consumption with society factors concerning food, household and resources and environmental problems and of health and life quality for the individual and others.*
>
> *—through aesthetic, practical, experimental and theoretical tasks shall have the possibility to develop self confidence, imagination, life joy and comprehension so that they together with others and by themselves will want, and be able, to take a critical stand and act in private life and in society.*
>
> *—shall be prepared to address problems concerning food, housekeeping and consumption in relation to culture, health and life quality, and sustainability. The education should aim at allowing pupils to experience the value of community and co-operation based on equal value and democracy.*
>
> (Ministry of Education, 2009)

The subject contains three core themes and several sub themes

- Health—food, nutrition and hygiene
- Culture—aesthetics, life quality, cooking and meals
- Society—resources and environment, ethics, food, consumption, hygiene.

All of these parts have to assist the pupil in obtaining abilities to act in school, home and society. As can be seen from aims and core themes, the content is covering humanistic, natural, and social scientific areas. Home Economics deals also with human beings' practice, necessary processes with materials and tools or with ready-made things and consumer goods. Nevertheless Home Economics is a basic handling of material resources for fulfilling and satisfaction of basic needs for food, clothes, and housing; but also the wants for goods, which fulfil needs other than the basics (Ministry of Education, 2009; Benn, 2007; Hjälmeskog, 2000).

The question being addressed now regards how this subject field can be unfolded and applied to present and future life, and how its teaching can include analytical, aesthetic, experimental, practical and communicative parts. Specifically, the questions are: What is reality? Has a broader understanding been integrated in the local home economic classes? How can we develop the field in our modern or post-modern society?

The answer to the first question is that there is no such thing as one Home Economics reality for all 2000 Danish schools and the half a million pupils. But from an initial representative questionnaire, classroom and interview study, contact with teachers all around the country, school visits and a later interview study of teacher students and educators, I have formed an impression of the "normal" Home Economics education in Denmark (Benn 1996, 2009). The School Act and curriculum have changed in between these two studies, so Home Economics has to be taught in another way and understood in another sense. The results of the mentioned studies showed that the pupils liked the practical elements of the subject, and often perceived it as a break in the school day. They believe that Home Economics is necessary to learn, but "*not as much as mathematics, Danish and other languages.*" And "*they find the more theoretical part of home economics dull and so it is and you can not change that.*" The pupils had much differentiated views, perceptions and knowledge of issues within Home Economics, for instance food, meals, diet and nutrition. Their pre-knowledge and concepts however are seldom taken into consideration by the teachers as are the questions and problems of the children's daily life. Rather, the teachers continue a historical tradition at the same time as they present their own values and perceptions held against a pragmatic line. All of these perspectives result in a definite teaching model, starting out with teachers planning without involving pupils. The single teaching session starts with a short theoretical lesson, followed by practical tasks chosen by the teacher and conducted by the pupils, who then evaluate the result by tasting the food prepared in the task. In the above-mentioned former study, I found that the specific content and focus chosen by the teachers mirrored a set of Home Economics teachers' ideal types. These were *the householder, the craft (wo)-man, the house-mother/wife and the gastronome*, (Benn, 1999) and the values related to the different ideal types resulted in different educational aims, in short either valuating the more theoretical, practical, social or aesthetic part of Home Economics (Benn, 1996).

Research project, methods and participants

The recent research study was an attempt to gain further understanding of Home Economics and to develop the subject. The classroom study was a qualitative study, which can be described as a sort of ethnographic study including action research features. According to Sagor (2000, p. 3–4) action research involves the following seven steps:

1. Selecting a focus
2. Identifying research questions
3. Clarifying theories
4. Collecting data
5. Analysing data
6. Reporting results
7. Taking informed actions

These steps are followed in a more or less linear time schedule. The focus of the study is compulsory Home Economics education in grade 6 classes of two selected Danish schools.

The research questions concern, as mentioned in the introduction, the development of broader content and a more critical perspective in Home Economics, which can contribute to pupils' everyday life action competencies for the future. The theories underlying the study are action research theory combined with theories that view the aim of education understood as critical 'Bildung,' and theories regarding the accomplishment of this Bildung (Klafki, 1985, 2007; Vygotsky, 1978).(Bildung is the German word for the end goal of education and here is understood in an emancipatory way).

The important feature of a qualitative study is that each event, feature or part is or becomes wholeness in itself. This means every event has a qualitative meaning, which—in opposition to the quantitative, representative studies—is not going to be representative but is unique and important. That is essential to keep in mind. I will refer to further studies of Kvale (1988, 1989), Glasersfeld (1995), and Schön (1983) or to the comprehensive edition from the American annual of Home Economics researchers on research methodology and theories (Coomer & Hultengren, 1989). These are the theories related to the first part of the title for the research: a *qualitative* study; the other part is specifically related to *classroom or the educational part connected to the subject: Home economics*. The research field of this subject is illustrated in the former-mentioned model of Nielsen; see Figure 3.

My research interest is Home Economics education linked to a historical dimension (a present and futuristic perspective), in a definite socio-cultural setting, in an observed and experienced reality. My investigation drew on discourses between researchers and involved actors pointing at Home Economics education in the triangle between subject-teacher and pupil using texts, non textual articulations, own perceptions and artefacts—all of which resulted in a qualitative study.

The research was carried out in two 6th-form Home Economics classes, with students aged 12–13 years in two schools, with two teachers, a male and female having practiced for some years; see Table 1.

	School A	School B
Community	Community outside, south of Copenhagen, established in the late 60s.Mixed habitat: Area with a huge apartment building, minor terrace houses and villas—middle and lower social class. Many new inhabitants.	Community outside, west of Copenhagen, Established 50 years ago, a few houses older. Mixed habitat: Area with apartment buildings, minor terrace houses and villas—middle class and lower middle class.
School building	20 year old, two floors recently totally restored. Open area in the middle.	40 years old, 3–4 floors, A little "worn out".
Pupils/classes	440 pupils /23 classes from 0–10th form	347 pupils /21 classes from 0–9th form
Teachers	60 teachers of mixed age	36 teachers of mixed age
School Policy & Environment	"Open doors"	"Closed doors"

Home Economics class	Newly rebuilt and decorated, open, like a professional kitchen.	Newly renovated, classical Home Economics classroom.
Home Economics Teacher	Male, age 34, completed education 5 years ago. Also teaches nature and technology, physics; class teacher. Teaches only this class Home Economics. Lives in the area. Cooks professionally sometimes, active in local area.	Female, age 32, completed education 5 years ago. Also teaches Danish, arts, swimming; and class teacher. Teaches only this class in Home Economics. Do not live in the area. Is much engaged in her own class and her professionalism.
Home Economics class	6th grade, 12–13 years coming from two classes 7 girls 5 boys (autumn) 5 different cultures represented. 22: 11 girls and 11 boys (spring) Pupils from 7 ethnic cultures	6th grade, 12–13 years coming from 1 class, all boys. 3 different cultures represented
Teaching conditions	3 lessons—12–15 reasonable resources	3 lessons—12–15 limited resources

Table 1: Comparison Scheme—School Characteristics (Benn, 2000)

The first part of the classroom studies involved observations of three of the Home Economics lessons every week for half a year, single in-depth interviews with teachers and pupils in the autumn and spring term, supplemented with conferences between teachers and researchers. In the spring term the action approach started out with some minor changes.

The course of research can be represented by diagram in Figure 4:

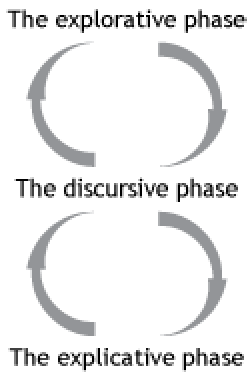

Figure 4: Phases in Developmental Work (Benn, 2000)

These concepts, which must be seen as tools for understanding, are elaborated upon in Table 2.

Phases	Explanation	Understandings
The explorative phase	The "fumbletumble" phase during which researchers, teachers, pupils, and the school are introduced to each other	▪ the researchers and their understanding, personal and professional ▪ the teachers, teacher views, teaching practice, personality ▪ the pupils, together and as individuals
The discursive phase	The "running forth and back" phase, where discussions concerning teaching and learning is at the agenda. Development work is established. Implementation of new methods and content. Evaluation procedures.	▪ splitting teaching and lessons in bits and pieces ▪ making new developmental attempts ▪ evaluation in different ways
The explicative phase	The "unfolding, expanding and explanation phase", where connection of theory and practice is elaborated, results are adapted in coherence with the relevant theories. Evaluation.	▪ comprehension of raised research questions, and/or ▪ raising new questions ▪ developing Home Economics understanding, education ▪ developing text books

Table 2: Phases in Developmental Research (Benn, 2000)

Progress and results

Classroom studies with a course like the phases outlined in Figure 5 were followed and performed. It has not been a smooth, simple, broad Research Boulevard to pass. We have, like all researchers, been meeting problems concerning time and resources, but also a lack of an exact "route" or map of the direction to be followed. It is still a sort of developmental and experimental study although a lot of other school projects have been carried out in Denmark and other countries in the latest years. We have found differences between schools, teachers and pupils, through interviews, questionnaires and observations. The differences were also seen in the "minor developmental studies" we initiated in the classes. The differences can be explained partly by structural and methodological differences but are also due to basic qualitative differences and, lastly, to the fact that no teaching situation can be the same at different places and in different times. Pupils and teachers (and also the researchers) are each time in a unique situation, which can not be imitated or recreated. Table 2 outlines some differences.

Discussion

The first observation period revealed many differences but also some common problems regarding Home Economics education

- the lack of clarification of the aim of the subject

and the single lesson

- too many goals in a single teaching period
- teacher decisions or goals may be unclear and/or unspoken
- pupils are not being heard
- pupils are not responsible for their learning
- too few tasks, lack of challenges relevant to "real life"
- lack of evaluation
- lack of learning environment to improve and further pupils' understanding and experiences
- lack of understanding of each other (listening, empathy, caring for each other etc) and of the discipline

These observations gave rise to discussion between researchers and the teacher (and children, on some occasions) and new ways to tackle these problems were discussed. Some small-scale projects were initiated in both schools. This phase could be categorized as a sort of *transformative phase* that evolved from the other phases.

This part could be realised only because the teachers and researchers worked together closely in the discursive and explicative phases.

The interviews were expected to reveal other interpretations of the problem and other possible solutions. This was seen in the former research.

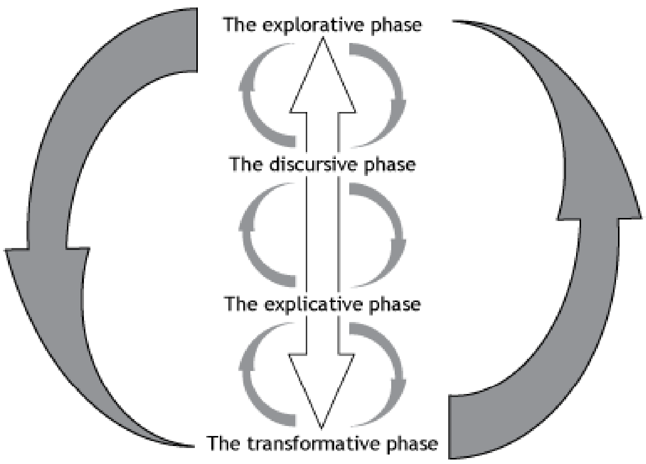

Figure 5: Phases in Developmental Work 2 (Benn, 2000)

Phases	Explanation	Understandings
The transformative phase	the phase where aspects of the other phases are intertwined and developed in an educational	Home Economics education related to general theories and Home Economics educational theories

Table 3: Phases in Developmental Work (Benn, 2000)

The transformative phase encompasses

- knowledge of society, basic educational and learning theories
- experiences from other work
- results of the interviews
- results of the discussions between researchers and teachers.

According to Giddens (1991), changes in today's late-modern or post-modern society relate to modernity and the daily social life. These changes can be both extensional and intentional. At the extensional level the changes are seen in the overall institutions and their geographical extent, whereas at the intentional level the changes hold consequences for our daily life, personality, identity and the intimate relations. These changes do also have consequences for the rational concept. *"Doubt is a general feature at the modern critical concept"* (Giddens, 1991, p. 11) and if the *"philosophy of enlightenment"* has disappeared, as mentioned earlier, then another way must be taken for school, schooling, education and cultivation or rather 'Bildung' (Schmidt, 1998).

These changes within society and within conditions for family, homes and households have—as earlier mentioned—had an impact on the latest curriculum, but to change the view of teaching and education is a difficult task. What lies within the late-modern society or late-age modernity is a need for change in the conception of education. The former-mentioned Schmidt talks about the need for non-traditional education or cultivation (untraditionelle Bildung), which means that we need both "cultures"—the collective and the individual—in a modern objectivity (Schmidt, 1998). This demands a broader view of relevant subjects or problems dealt with in the school (and outside) and a move from an emphasis on teaching to an emphasis on learning, which demands a shift in the teacher's role and another view at the responsibility of the learner or pupil. But this view involves the risk of too much focus on the individual and a potential cost for the collective.

The preliminary results of the classroom studies led to consideration of some possible "small-scale" but influential changes within the Home Economics education. Three key issues can encompass the overall thinking relating to these changes; these are *involvement and participation; responsibility; and evaluation*. First, it is necessary for the teacher to be aware of what s/he finds most important in the aims, content, and working methods of Home Economics outlined by the national curriculum. Then she/he has to discuss with the pupils their conceptualizations of Home Economics and what they expect to learn. In addition, pupils must be involved in the planning of themes so that they feel responsible for their learning. Such involvement requires that it is not what Dena Attar (1993) calls the *teacher's problem* that is put on the agenda, but the *pupils'* [problem(s)].

The last key component – evaluation – can occur in many different ways, and both formative and summative evaluation is necessary. Potential methods of facilitating evaluation and responsibility are the pupils' use of a log-book; engagement in common or group evaluation by the class after the single lesson; and the use of mind maps or concept maps to assist the pupils' learning of more complex issues. Finally, the themes must be evaluated; this might occur through photo documentation, demonstrations for others, or simply testing. The evaluation methods must be varied.

The implementation period tested

- use of more-differentiated practical and theoretical tasks and a combination of these, and use of tasks differentiated according to levels
- introduction of more tasks expanding the practical work (combining theory and practice), sensory schemes, consumer survey tasks
- expansion of the learning environment to the near environment (market places, shops, etc.)
- increasing pupils' awareness of their existing knowledge, discussing their desired knowledge, raising new questions
- making pupils aware of what they learnt through evaluation
- allowing pupils to influence the issues discussed or choose between projects
- making pupils more responsible within the learning situation

In the following third period, the final evaluation, the project was used as to develop a text book and a teacher's guide for grades 4–7 and grades 8–10 (Benn & Haugböl 2005a, 2005b, 2002). The challenge was huge, as we wanted to present possibilities for the pupils to ask their own critical questions and to suggest and perform their own solutions for the questions they raised. In addition, the tasks varied in complexity so that every pupil had a chance to be challenged in his or her proximate zone of development, as suggested by Vygotsky (1978). Furthermore, we wanted the themes to cover the broad range of issues represented by the subject of Home Economics.

Examples from the project

In the developmental work, as in the text book, we began by asking the students to discuss what Home Economics is about and what they wished to learn, and presenting them with the official requirements of the subject. The pupils and teacher then cooperatively planned the next lesson. Some themes involved narrow aims, such as the development of pupils' basic skills; other themes involved broader problem-based issues. An example of the first theme was the focus on vegetables and fruits in pupils' diets, with an emphasis on nutrition, cooking, tasting and testing, and a discussion of the environmental perspective that promotes reduced consumption of animal products.

A broader issue was health, wellbeing and life quality. This was addressed by asking pupils to explain their understanding of health and life quality. Students were required to act as a food coach for other pupils. This theme was finalised by students' creation of a fantasy menu in groups to serve for another group. Within this theme a lot of different techniques were used: A food model judged the daily intake, a food programme analysed nutritional content, a piece of the film "Babette's Guest" was used to offer inspiration, the web was used to search for recipes for the fantasy meal, and menus and tables were photographed. Evaluation occurred partly through dialogue about students' cooperation and choices, and partly through pupils' log books containing specific issues and results from each of the lessons. Every theme was finalised by the posing of a question about students' current knowledge, and the knowledge that they wish to gain in the coming theme.

Some themes from the project were

- a licence to operate in the kitchen and home – basic courses in techniques and knowledge
- to explore with your senses
- spices in your life
- the curious camera
- food at the table – to buy with care
- from fire to microwave
- fish on the agenda and menu (The theme was in Danish called: 'when the day goes into the fish'. This has a double meaning, both to research fish all day and the day gets in a mess)
- life quality and feast (this theme was inspired by pupils' wishes to make favourite meals and Karen Blixen's novel Babette's feast, which the pupils saw as an introduction)
- food for you—diet for others

Perspectives—reality versus visions

The results of the study indicate that research in the field of developmental work and action research is necessary in order to develop Home Economics education. Results indicate also that reality in the school must be taken into consideration when development is on the agenda. Change cannot be achieved without understanding the specific situation and environment. However, within education, it is always possible to reconsider the situation and to act in another way, to change the situation by posing the question: How can we improve learning and education in the school?

To begin, we can act according to the problems as mentioned above.

To summarise: Preliminary research findings indicate that we must

- define or clarify aims and goals
- involve pupils in responsibility
- take pupils' concepts, understandings and experiences into consideration
- develop the learning environment
- develop variable and differentiated materials
- be aware of changes in everyday life and society

For the researchers there exists a need for

- development of research methodology
- international co-operation within research
- development of Home Economics in co-operation with other researchers (both Home Economics researchers and researchers within the general educational area) and with practitioners (regarding learning, content, and materials)

Home Economics is not one discipline but a life area brought into the school, initially for girls (for the last 100 years) and later for both boys and girls (about 30 years). Is this a necessary subject in the school in the 21st century in a modern industrialised society (understood in a broad sense), which has appropriated a lot of tasks formerly regarded as tasks for the household, home or family? Or one may pose the question: Is Home Economics still a worthwhile project? The answer may be no, if you see the "oikos" (ancient Greek equivalent of a household, house, or family) completely abandoned from the arena. Alternatively, Home Economics may be viewed as necessary if people want to be able to choose between alternatives meaningful both to the individual and to the collective, and to take an active part in society. It may also be viewed as necessary if it is perceived as a supplement to general 'Bildung' or a full education also as an untraditional education, if it is wanted that you must be able to choose between alternatives, which is meaningful for the single person and the group in order to take active part in society regarding actions related to Home Economics. Home Economics is also related to our cultural heritage, not as reminiscence but as a necessary tool to develop an understanding of coherence – coherence between nature and culture, between homes, institutions and societies. We interact with our surroundings and the world outside; we influence and are influenced. This reciprocal influence applies to both the material and immaterial part. Therefore it is essential in all education that the teaching environment offers optimal possibilities and challenges in relation to the single pupil and the group. Learning is in other words about to do, to experience, to belong and to become. Learning is

- to do in order to be able to
- to experience in order to know
- to belong to in order to be willing
- to become in order to be

The huge challenge for the teacher is to assist the learner to build the bridge and see the connection between practice and theory, between the sensory and the creative, between the intellectual and the practical and social. The practical experience, may for a part, talk its own language, as it is by hand and in the hands. It (the practical) must not be tacit, but discussed and described and analysed according to the level of the pupil. Overall the goals in the single themes are related to the doing, experiencing, belonging, and becoming. These must be the elements, which shall be within practice if Home Economics is going to be Home Economics in action alone or in thoughts, words and actions. These aspects are related to Wenger's concepts of learning—learning as doing, experiencing, belonging and becoming—which refer to learning in cooperation (Wenger, 1999).

These elements were applied to the content and aims of Home Economics education. The teaching of Home Economics is also inspired by Antonovsky's view that coherence can be accomplished if teaching is meaningful, comprehensive, and manageable (Antonovsky, 1979, 1987). Antonovsky uses the concept to encompass what is needed to make human beings 'life competent.'

The issues discussed in this paper were the focus of the project and were later addressed in the text book: *Home Economics in words and actions*. It is said in the introduction in the teachers' book:

> *'If a brief aim is to be given, we want to do it in the words: Understanding of coherence and knowledge of everyday life. The subject has to contribute to an understanding of the fact that the way we behave as human beings has a meaning for ourselves and for others, for the near and the distant environment. But there is not necessarily only one proper solution to the problem. The knowledge, skill and wisdom are achieved through a combination of words and actions, fantasy, identification and involvement. (Benn & Haugböl, 2005b, p. 16–17)*

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Biography

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References

Antonovsky. A. (1979). *Health, stress and coping.* San Francisco: Jossey-Bass

Antonovsky A .(1987). *Unraveling the mystery of health. How people manage stress and stay well.* San Francisco: Jossey-Bass.

Attar, G. (1993). *Wasting girls' time. The history and politics of home economics. The education series* The Education Series. The University of London Institute of Education: Jossey-Bass

Beck, U. (1992). *The risk society: Towards a new modernity.* London: Sage.

Benn, J. (1996). *Kost i skolen—skolekost II, en undersøgelse af forhold, tilbud og muligheder i forbindelse med skolernes undervisning i kost og sundhed. Anvendt naturfag, frikadellesløjd eller sundhedsbiks* [Nutrition in school—School nutrition II. A survey of circumstances, offers and possibilities in connection with the teaching in the schools in nutrition and health. Applied science, cooking craft or healthy hash]. Ph.D. Thesis, The Royal Danish School of Educational Studies, Copenhagen.

Benn, J. (1999). Home economics teachers, their roles and valuations in past and present—Implications for the future. *Hauswirtschaft und Wissenschaft, 4*, 157–164.

Benn, J. (2009). Practical wisdom, understanding of coherence and competencies for everyday life. *International Journal of Home Economics, 2*(1), 2–14.

Benn, J. (Ed.). (2000). *Home economics in 100 years. Home economics in the 21st century. History, perspectives & challenges.* Copenhagen: The Royal Danish School of Educational Studies.

Benn, J. & Haugböl, B. (2002). *Hjemkundskab i tanke, ord og handling. Elevens bog* [Home economics in thoughts, words and action. The pupil's book]. Copenhagen: Alinea

Benn, J. & Haugböl, B. (2005a). *Hjemkundskab i ord og handling. Elevens bog* [Home economics in words and action. The pupil's book]. Copenhagen: Alinea.

Benn, J. & Haugböl, B. (2005b). *Hjemkundskab i ord og handling. Laererens bog* [Home economics in words and action. The teacher's book]. Copenhagen: Alinea.

Benn, J., Hjälmeskog, K., & Turkki, K. (1998). *Home economics in curriculum and research.* Copenhagen: The Royal Danish School of Educational Studies.

Brown, M. (1984). Proud past promising future. *Journal of Home Economics, Winter 27*, 48–54.

Coomer, D. L., & Hultengren, F. (1989). *Alternative modes of inquiry in home economics research.* Peoria IL.: Glencoe.

Giddens, A. (1991). *Modernity and self-identity. Self and society in the late modern age.* Cambridge: Polity Press.

Glasersfeld, E. von. (1995). *Radical constructivism: A way of knowing and learning.* London: Falmer.

Habermas, J. (1981). *Theorie des Kommunikativen Handlens.* Frankfurt: Suhrkamp.

Hart, E., & Bond, M. (1995). *Action research for health and social care.* Philadelphia: Open University Press.

Hjälmeskog, K. (2000). *Democracy begins at home: utbildning om och för hemmet som medborgarfostran.* Uppsala : Department of Education, Uppsala University.

Klafki, Wolfgang. (1985). *Neue Studien zur Bildungstheorie und Didaktik* [New studies of Bildung theories and education]. Weinham: Beltz Verlag

Klafki, Wolfgang. (2007). *Wege pädagogischen Denkens* [Ways of educational thinking]. München, Basel: Reinhardt.

Kvale, S. (1988). The 1000-page question. *Phenomenology + Pedagogy, 6*(2), 90–106.

Kvale, S. (1989). To validate is to question. In A. Editor (Ed.), *Issues of validity in qualitative research* (pp. 73–92). Lund: Studentlitteratur. Teori, Forskning, Praktik.

Ministry of Education. (2009). *Common aims 2009*. Home economics, syllabus 11 (in Danish only – see: www.uvm.dk).

Nielsen, F. V. (1999). *Den musikpædagogiske forsknings territorium: Hovedbegreber og distinktioner i genstandsfeltet. Arbejdspapir 14. Skolefag, Läring & Dannelse* [The research territory of music-pedagogy. Main concepts and distinctions in the object field. Working Paper no 14. School subjects, learning and education]. Copenhagen: The Royal Danish School of Educational Studies..

Pendergast, D. (2001). *Virginal mothers, groovy chicks & blokey blokes: Re-thinking home economics (and) teaching bodies.* Brisbane: Australian Academic Press.

Rasmussen, J. (1993): Læring og socialisation i skolen. I: Cederström, J. et al. Eds.: Læring, samtale, organisation: Luhmann og skolen. Kbhvn.: Unge Pädagoger serie B57 (Learning and Socialisation in the School)

Ritchey, S.J. (1989): Role of empirical science in present day home economics practice. In: Coomer, D. L. & Hultengren, F. (1989): *Alternative Modes of Inquiry in Home Economics Research.* Peoria IL.:Glencoe: 24-29

Sagor, R. (2000). *Guiding school improvement with action research.* Association for Supervision & Curriculum Development. Available at http://site.ebrary.com/lib/stats/docDetail.action?docID=10115189

Schmidt, L. H. (1998). *Utraditionel dannelse* [The Esthetics in an educational perspective]. In B. Holm Sörensen (Ed.), *Det æstetiske i et dannelsesperspektiv*. Copenhagen: The Royal Danish School of Educational Studies.

Schön, D. (1983). *Educating the reflective practitioner*. N.Y.: Basic Books

Vaines, E. (1990). Philosophical orientations and home economics: An introduction. *Canadian Home Economics Journal, 40*(1), 6–11.

Wenger, E. (1999). *Communities of practice, learning, meaning and identity*. Cambridge: Cambridge University Press.

Vygotsky, L. (1978). *Mind in society.* Cambridge: Harvard University Press.

Name changes and future-proofing the profession: Human Sciences as a name?

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Abstract

This paper explores the implications of the trend towards naming the profession Human Sciences*. After providing a history of the meaning of* the *human sciences, the discussion tentatively explores what it means for us and others if we choose* Human Sciences *(without the article* the*). A case is made that any name change, including this one, has the potential to impact our ability to influence and preserve the uniqueness of our professional and disciplinary contributions (along eight dimensions). The paper ends with a discussion of naming conventions and why a name matters as we future-proof the profession.*

Key words: Home Economics, human sciences, name changes, human condition, family and consumer sciences, human ecology

Introduction—factors behind name changes

A name has power—hidden power (Pendergast & McGregor, 2007). People will draw conclusions and impressions of something when it is given a *name*, but they will not make these same inferences when the label is absent, even if the same features are present (Yamauchi & Markham, 2000). This finding has implications for Home Economics. Because concepts, including peoples' conceptualization of Home Economics, are embedded in their knowledge structures, their (in)experiences with Home Economics will affect the conclusions they draw when they hear the name, no matter what people do in the profession. For this reason, since assuming the name Home Economics at the 1899–1909 Lake Placid conferences, the profession has repeatedly engaged in contentious discussions of an appropriate name (Peterat, 2001).

Kerka (1996) identifies several forces that drive our penchant for changing the name and focus of the profession: (a) changes in women's roles and family structures; (b) poor image and struggles over professional identity; (c) a desire to increase the standing of the field in the academy; (d) the low priority accorded to home and family in a society predicated on the patriarchal ideology; (e) a desire to ensure gender equity by recruiting male students and practitioners; (f) a need to increase professional visibility, legitimacy status and prestige; (g) the intent to reflect the evolution and development of the professional field of study in higher education; and (h) the trend toward integrated and holistic curricula and knowledge (see also Newman, 2003; Pendergast & McGregor, 2007; Pepall, 1998). Dr. Gwen Hay (Cornell University) recently described name changes in the profession as "an external symbol of an internal revolution" (Zheng, 2009, p. 1).

Peterat (2001) and Vaines (1997) explain that for many Home Economics professionals, *Home Economics* is a meaningful identity that they have actively constructed through their study, practice and reflection, doing so in a variety of professional communities throughout their careers. They are quite comfortable with the name. For them, any discussion of a name change is seen as a challenge to their hard-earned professional identity, one that holds deep meaning for them. For others, the name means nothing in itself; instead, these home economists ascribe meaning to the names through their practice, through how others come to know them, and through actively constructing and reconstructing their identities through the names. They believe that names are "open for renewal" (Peterat, p. 30)

The foray into another name change—*Human Sciences*—is the most recent in a long line of likeminded activities. Kerka (1996) asserts that "what is happening in Home Economics reflects the overall restructuring taking place in many educational institutions" and should not be construed as "a field in crisis" (p. 3). Instead, name changes should be taken as a sign that the discipline that was called Home Economics has evolved far beyond its original definition. The new name(s) should be seen as signs of esteemed change and forward development. What tends to happen, however, is that name changes create confused dilution of the long-standing intent of the profession, a situation that is exacerbated when different nations around the world adopt different monikers.

The following examples illustrate the proliferation of name changes at the international level. Claiming that the name Home Economics was becoming increasingly inaccurate in describing the work of the discipline with its many sub-specialities, United States opted to change the name of the profession to Family and Consumer Sciences (FCS), at the 1993 Scottsdale Conference. The intent of the name change was to move beyond the stereotypic connotations of the term Home Economics so as to communicate a broader focus than the home (Vincenti, 1997) (see also http://www.kon.org/scottsdale.html). Several African nations followed suit, likely because many African Home Economics leaders studied in United States. Canada retained the name Home Economics, but many university programs changed their name to human ecology (in the early 1990s) (Pereria, 2008). The United Kingdom shifted from Home Economics to consumer sciences (Bailey, 2008). The Pan-Asian/Australian region uses the name Home Economics as does the Caribbean and Central and South America. In its 2008 Position Statement, the International Federation of Home Economics (IFHE) decided to retain the name Home Economics; yet, it described Home Economics as "a field of study and profession situated within *the* human sciences..." (p. 1, emphasis added).

In keeping with our longstanding penchant to change our name (Newman, 2003), there is now a movement within the profession to use the name *Human Sciences*. Indeed, Kappa Omicron Nu (KON), one of the five professional organizations present at the US 1993 Scottsdale Conference, opted not to adopt the name FCS but to use Human Sciences instead (Vincenti, 1997). The premise of this paper is that this moniker is *already being used* by a collection of disciplines refereed to as *the* human sciences. What are the implications of distinguishing a whole profession from a collection of other disciplines simply by leaving off the article *the*?

Home Economics has evolved over 100 years by drawing insights from the natural, human and social sciences to develop its own body of knowledge, concepts and philosophy—it is proudly interdisciplinary. It has stood outside of these three spheres as a unique discipline and profession that focuses on the quality of daily life of individuals and families. Does adopting *Human Sciences* mean we are inadvertently seen as aligning with one of the dominant sciences and not others? Given our interdisciplinary approach, do we want to be seen as dissociating with particular sciences? To answer this and many other questions, the paper will first explain the notion of *the* human sciences, turning then to a discussion of what it might mean to the profession if we adopt the moniker *Human Sciences* (minus the article the). The paper ends with a collection of more questions and an overview of why a name matters at a time when we are attempting to future-proof the profession, with future-proof defined as "anticipating future developments to minimize negative impacts and optimize opportunities" (IFHE, 2008, p. 2).

The Human Sciences

The label *the* human sciences arose out the transition from Pre-modern (Medieval) to Modern times. During Medieval times, the focus was on theology and divine studies. During Modern times, the focus shifted to humanities and human studies, as opposed to the study of the divine and the word of God. Also, at this time, the Feudal system collapsed, and was replaced by the Mercantile system. When this happened, people were no longer slaves. The result was the formation of university liberal arts programs for the education of citizens who were *free* from slavery (liberal is from Latin *līber*, free). The courses originally designated as liberal arts included grammar, logic, rhetoric, geometry, arithmetic, music and astronomy (Steiner & Liberman, 2001).

During the 1800s, the physical sciences matured to the point that they had their own curriculum. When this happened, the humanities moved from being distinguished from divinity studies to being distinguished from natural sciences. The scientific method became so popular that the study of humans changed so it embraced the scientific method. This change led to a group of disciplines that became known as *the* human sciences. Society ended up with a collection of disciplines that studied the *nature of humans* and another collection of disciplines (e.g., chemistry, biology, physics) that studied *nature* and the material world (Steiner & Liberman, 2001).

Originally, *the* human sciences was the collective label for anything left over after the natural sciences had been accounted for. Today, *the* human sciences has evolved as a label that represents the combination of both the humanities and social sciences, which are still seen to be two different areas of study. Even though there is some fluidity in how these two areas are identified, the following is a safe enough distinction. Those practicing in the social sciences tend to use the scientific method to study humanity (e.g., sociology, psychology, political sciences, economics, history, anthropology and linguistics). Their goal is to quantify human interactions. On the other hand, those in *the* human sciences, the humanities, are committed to studying aspects of the human condition from a non-scientific approach (e.g., Classics and literature, philosophy, religious studies, women's studies, art, jurisprudence and law, and ethnic and cultural studies) (Amato, 2002; Bullock & Stallybrass, 1977; Machamer, 2008).

The human sciences (including social sciences) is now seen as a collection of disciplines that is oriented toward the interpretation of the human experience rather than an explanation of the human experience (as is natural science). Hermeneutics, which means interpretation, is thought to be the key to *the* human sciences (Machamer, 2008). The word hermeneutics derives from the Greek god *Hermes* in his role as patron of communication and human understanding. When someone interprets something, he or she examines it in order to determine the intent. Interpretation refers to making sense of something. Instead of just an explanation, it is a critical explanation or analysis of something to reveal the intentions, the underlying purpose, the goal for doing or saying something. Those engaged in *the* human sciences strive to offer an analysis of the human experience that moves thinking from what humans *are* (the nature of humans) to what enables them to know what *life is*. *The* human sciences constitute a body of discourse that addresses the gap between a human as an external, empirical object of study and a human as a subject who has internal perceptions and knowing (Foucault, 1970). von Wright (2004) concurs that *the* human sciences favour internal psychological experiences while the natural sciences respect insights gained from external sensory observations.

The human sciences study people as they really are, investigating their human potential with the intent to reveal the human condition. It is a science of qualities not quantities (Saybrook Graduate School and Research Center, 2009). In a discussion of the distinction between natural and human sciences, Cherniss and Hardy (2008) clarify that *the* human sciences study the world that human beings create for themselves and inhabit. It is concerned with understanding the particulars of human life in and of themselves. *The* human sciences are concerned with individuals, especially differences among individuals (compared to natural sciences' focus on regularities and similarities). *The* human sciences focus on understanding the uniqueness of specific human phenomena by creating knowledge of humanity, derived through direct experience, introspection and interaction with others.

Human Sciences as a name for the profession

We now live in a time when boundaries between *the* human sciences are starting to breakdown (Association for Humanistic Psychology, 2009). It seems some home economists are taking advantage of this situation by choosing the name *Human Sciences*, dropping the article *the*, and crossing that blurring boundary. Barbara McFall (KON Research Fellow) goes so far as to suggest that perhaps *Human Sciences* (as a name for our discipline) could be construed as a subset of the broader *the* human sciences (personal communication, August 18, 2005). Given how the academy in general has come to understand *the* human sciences, as described in the previous section, what dynamics do we set up by calling Home Economics *Human Sciences*? How do home economists understand this term? Is this understanding the same as that held by the rest of the academy? Should we be concerned? Does it matter if we choose this name for the profession, given the power of names?

For example, even though the profession in the United States was renamed FCS, some university programs chose *Human Sciences* instead, as did KON, the leadership honour society. KON understands *Human Sciences* as an academic framework for the purpose of improving and enhancing quality of living. It signifies a commitment to improving social justice and developing relations for the benefit of all (see http://www.kon.org/information.html). Some university FCS programs changed their name to *Human Sciences* and joined another academic unit (especially health, education or agricultural units). The latter's name almost always comes first, followed by *Human Sciences* (e.g., Department of Education and Human Sciences). Sometimes, the Home Economics, FCS or human ecology department is housed within a college or faculty containing the name *Human Sciences.* The same trends are followed at the international level.

Some of these FCS-related programs chose new language to reflect their shift in focus. Others continued to use the same program descriptor language; they simply call themselves *Human Sciences*, with no definition of how they understand the term. The list that follows is just a sampling of some program statements that specifically describe university Home Economics/FCS programs as *Human Sciences* (emphasis added in the quotes):

- "The common body of knowledge that comprises *human science* is drawn for [sic] the conceptual areas of nutrition, clothing, shelter, human development, relationships, resource management and consumer economics. Emphasis is placed upon the development of leadership, critical thinking, problem solving and research skills" (Texas A&M);
- "The hallmark of *human sciences* is interdisciplinary scholarship with *human* well-being at its center" (Auburn University);
- "Our mission of improving and enhancing *the human condition*" (Texas Tech University);
- "Improve the lives, health and environments of individuals, families, and communities, address *human* needs, prevent and solve *human* problems, and improve lives and environments of all people, including the most vulnerable" (Oregon State University); and,
- "Academic programs in *Human Sciences* prepare professionals who seek innovative solutions to the challenges of a contemporary society and of a changing world. The fundamental focus of the discipline is *on humankind and the human condition* throughout the life cycle" (Stephen F. Austin State University).

Political or philosophical motives?

Regarding the trend of university programs changing their name to *Human Sciences*, Pendergast and McGregor (2007) suggest that repositioning the discipline with(in) other disciplines is often done to gain legitimacy. Ironically, the end result often means further marginalization with deepened confusion about our identity. This line of thinking begs the question, "How much of the choice to rename units *Human Sciences* is political and how much is philosophical?" If units are just changing their name, but not the philosophy and program content, it could be argued they are doing the profession a disservice because there will a proliferation of programs doing the same old thing, just with a different name. Some would say this situation creates confusion for the profession. It would be too easy, when someone sees the name *Human Sciences*, to assume the program offers something different than family and consumer sciences or human ecology or Home Economics. This assumption could lead to a loss of identity and influence. Others say the name change reflects smart survival and future-insurance marketing for each individual program. What are we doing to ourselves as we struggle to remain viable in the short term?

Barbara McFall feels the moniker *Human Sciences* allows practitioners to embrace the totality of the human experience and enables us to take up the original 19th century Lake Placid conceptualization of the profession. The intent was to focus on the full human experience that favours (a) the immediate environments, not necessarily home and (b) the social being, not necessarily family (personal communication, August 18, 2005). This approach challenges our conventional approach to family and home, eliciting images of larger environments, the human family, even the commons. To play devil's advocate, consider that Home Economics has evolved over 100 years by drawing insights from the natural, social and human sciences to develop its *own* body of knowledge, concepts and philosophy. As a unique discipline, Home Economics has stood outside these three sciences. Does it make sense to name the profession after one of these sciences (dropping the article *the* and saying *Human Sciences*)? Or, should we consider doing so, taking direction from KON and like-minded organizations who seem to be embracing a new conceptualization of *Human Sciences*? The latter views interdisciplinary work as transcending the arbitrary division between the arts and the sciences, involving the study of a number of disciplines in relation to a central problem—the human condition (e.g., University of Sussex, 2008). For this reason, the idea of the human condition and Home Economics warrants further exploration (McGregor, 2008b, 2010b).

Well-being versus the human condition?

The change in language used in the self-identifying program statements listed previously is very noticeable. Instead of saying family and individual well-being, the programs are now choosing a different noun—*human*: human needs, human problems, human well-being, the human condition, humankind. Because little else is available on these particular web sites to determine anything deeper, it was difficult to determine if the orientation to preparing pre-professionals has changed or if just the words to describe the program have changed. If indeed the focus has shifted from individuals and families to humans, this is a profound shift in professional and disciplinary focus.

The human sciences are devoted to society, the practical needs of society, and have socio-historical reality as its subject matter. They are concerned with forces that rule society, and with society's resources for promoting healthy progress (Dilthey, 1883). *The* human sciences study people as they really are, investigating their human potential with the intent to reveal the human condition (Saybrook Graduate School and Research Center, 2009). Home Economics (now called FCS, human ecology, human development or consumer sciences) has always said it is about individual and familial well-being within the context of community and society, but it has not yet collectively, unanimously, embraced the idea of the human condition, the focus of *the* human sciences (McGregor, 2008b, 2010b; McGregor, Pendergast, Seniuk, Eghan, & Engberg, 2008). Are we misleading people if we use the moniker *Human Sciences*, especially if we have not collectively decided that our focus is the human condition?

There is a difference between a focus on well-being and a focus on the human condition (McGregor, 2009b, 2010b). Well-being is usually used in conjunction with individuals and families (and communities), meaning Home Economics used appropriate rhetoric.

Traditionally, Home Economics has focused on family well-being and quality of life (McGregor & Goldsmith, 1998). On the other hand, the notion of *condition* is usually associated with all of humanity. This usage occurs because the word condition means existing circumstances. The human condition refers to the past or current lived experiences, the current state of affairs of a collective people—the human family (McGregor, 2001).

Only a few Home Economics practitioners have begun to call for a shift away from well-being toward the human condition. McFall (2007) coins the phrase *qualities of living* to replace well-being and wellness. Brown and Paolucci (1979) reference the human condition numerous times. In particular, they characterize the types of problems home economists should address as practical, perennial problems that are "manifestations of a pervasive quality of the human condition which carries across epochs in history" (p. 33). Brown (1993) asks us to engage in "in depth analysis of the human condition of modern society... of human life and a human world" (p. 250). She advocates that, to do this, we adopt a normative approach to well-being. This means that instead of *describing* the economic, social, physical and emotional states or conditions of families and individuals (dimensions of well-being), we would go further and *interpret* those *conditions* using concepts such as: justice, equity, fairness, freedom, human rights, human security, resiliency, participation, power, responsibility, and interests.

East (1979) characterizes Home Economics as a focus on the home and family for the betterment and improvement of humanity and society. She asserts, "Home Economics ... applies rational thought to home life for improving that matrix for human development" (p. 141). East clarifies that rational thought includes each of: (a) *power* from intellectual thinking that searches for alternatives while perceiving relationships and connections; (b) *richness* from awareness, sensitivity, compassion and sensuality; and (c) *clarity* from asking and answering philosophical questions about the meaning of life.

A group of home economists in Japan is re-framing their practice with a focus on the human condition (Fusa, 2004). They propose that protecting the home, the domain where families live, from the rampant incursion of the ills of an industrial society, will promote the complete actualization of the true human nature and the soundness of human life. McGregor (2008b, 2009b, 2010c) is actively lobbying for such a shift in focus and professional philosophy (see also McGregor et al., 2008). Home Economics pre-professional training has traditionally been grounded in the social and natural sciences, not the humanities (Twyla, 1971). Does changing our name to *Human Sciences* (embracing the humanities) serve as a catalyst for a shift to a focus on the human condition? Would it impact (augment or compromise) our continued uniqueness as a discipline? The next section explores this idea.

Preserving our uniqueness

Being subsumed into *the* human sciences is a real possibility if we choose the name *Human Sciences*. To be subsumed means to be incorporated into a more comprehensive category within the academy, further contributing to a crucial loss of identity. Carefully crafted messaging will be necessary to ensure we do not lose our academic presence and professional influence. Would choosing the name *Human Sciences* impact our ability to preserve the uniqueness of our profession and discipline? Because... Home Economics *is* unique from other disciplines. To be unique is to be incomparable to anything else. It means being one-of-a-kind, without equal, a having separate category all on its own. If a profession is unique, it has no rival because it is radically distinct from all other professions. The Latin root is *ūnicus*, only (Oxford English Dictionary, 1989). The following text identifies eight enduring, unique aspects of our academic and professional contributions (see Figure 1) (see as well McGregor et al., 2008).

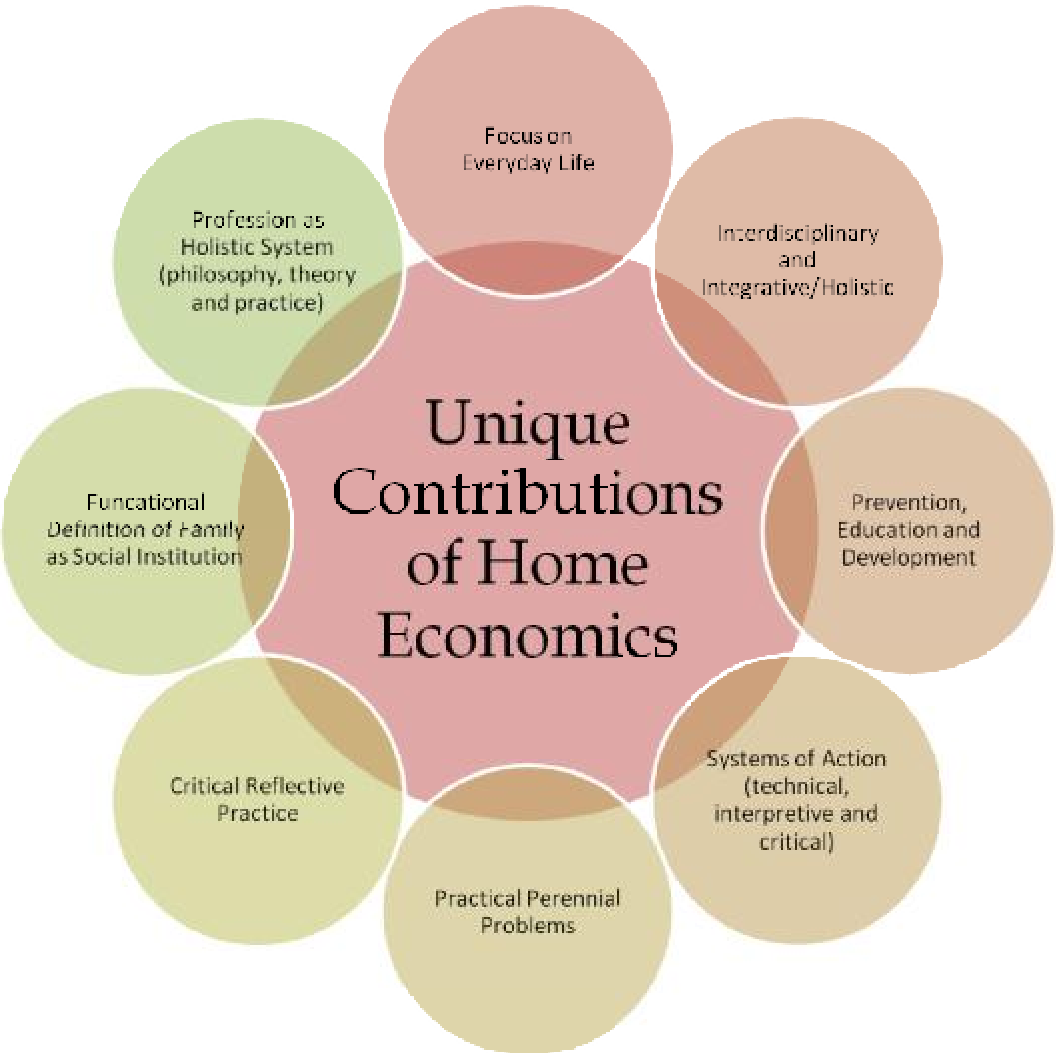

Figure 1: Unique contributions of Home Economics

Focus on everyday life

The most fundamental uniqueness of Home Economics is its focus on the everyday life of people. *Everyday* pertains to routines and practices found in the ordinary course of events. Home economists deeply believe that managing everyday life is not easy. It presupposes cognitive, social, emotional and practical skills and dispositions that are locked away in people's consciousness and need to be revealed, articulated, respected, and studied.

Everyday life, the culture and quality of day-to-day activities, is paramount to humanity (Tuomi-Gröhn, 2008). However, focusing on something as mundane as day-to-day life is unique and risky in a time when the home and family are not valued except for their role as laborers and consumers. Home Economics also faces the challenging reality that lay people think it is easy to provide services for individuals and families, so easy that no special training is needed. Everyone lives in a home and in a family, right? To address this perception, we are uniquely socialized to believe that we are a profession (Brown & Paolucci, 1979) that should meet this deep challenge by helping families help themselves become empowered as contributing world citizens (McGregor, 2005, 2008a, 2008b, 2009a).

Integrative interdisciplinarity

Another unique aspect of Home Economics is its long standing commitment to integrative, holistic, interdisciplinary practice (McGregor, 2009b; McGregor et al., 2008; McGregor & MacCleave, 2007). Unlike other professions, the knowledge appropriate to Home Economics is not unique. What *is* unique is that members of the profession pay attention to the problems families encounter daily, from one generation to another (perennial problems, see below), and then draw information and insights from a number of disciplines to address these problems. After critically examining this information, they weave it together into a knowledge base that is used for the current accepted social end of the profession: well-being and quality of daily life (Brown, 1980). This approach to practice is profound, and very different from the common understanding of what we do. Home economists are often told that they problem-solve totally differently than others (McGregor, 2008b). We have always brought this unique approach to our work. In the 1902 Lake Placid Conference proceedings, founders of the profession in North America noted that Home Economics is a philosophical subject involving the study of *relations* while the subjects/disciplines upon which it depends for its interdisciplinary inquiry are empirical in nature, focused on *events and phenomena*. It is imperative that the profession bind these two notions together—relations with events and phenomena—because that is what makes us unique (as cited in Brown & Paolucci, 1979, p. 11). This obligation suggests we need all three sciences.

Prevention, education and development

Contributing to its uniqueness is the profession's focus on the trilogy of prevention, education and development (PED). The PED approach contrasts with other professions' concentration on facts and information out of context, intervention, and remedial measures to mitigate a crisis or maintain the status quo. Using the PED approach to practice, home economists work with families to: (a) ensure the acquisition of skills and modes of thinking essential for functioning in society (education); (b) instill a preventative approach to living day-to-day; and (c) develop a focus on evolution and progress, especially as regards the improvement of the range and critique of choices available for everyday life (development) (McGregor et al., 2008; McGregor & MacCleave, 2007).

Systems of action

The profession has developed a unique approach to practice called *systems of action*. We assume that people can draw upon their inner potential, network and lived experiences as they learn to: (a) cope with change by learning new skills and techniques; (b) adapt to change by gaining deeper understandings and insights into values, attitudes and meanings, leading to stronger familial relationships; and/or (c) engage in social action and change power relationships to improve the human condition for everyone. Each of these *actions*, respectively technical, interpretive and critical, refers to a way to think about something before acting. We approach people experiencing problems and work with them to determine which combination of coping, adapting and affecting change is appropriate for them given their current situation and future inclinations and possibilities (Brown, 1980; Brown & Paolucci, 1978; McGregor, 2007; McGregor et al., 2008).

Practical perennial problems

Our profession is also unique in that it focuses on problems that families encounter every generation (perennial), but with the assumption that the approaches to solving these problems have to change because the context has changed (these are called *practical, perennial problems*). For example, after World War II, housing issues related to a need for many new homes due to an increase in marriages and children. In the 21st century, housing and shelter issues are still with us but they look different—homelessness, gentrification, problems with excessive urbanization and isolated rural communities. These are called *practical* problems because there is a question about which action should be taken. In this usage, *practical* means voluntary, intentional reflection before taking any action the action that is taken after such reflection is called *reasoned action*—think before you act (Brown, 1980; Brown & Paolucci, 1978). Members of our profession assume that things happen in *context* thereby preventing us from taking for granted that what once worked will automatically work again (Brown, 1980; Vaines & Wilson, 1986).

Critical reflective practice

As we apply these approaches to practice, we are socialized to engage in morally defensive, ethical practice guided by critical, personal reflection. We are encouraged to engage in dialogue in communities of practice. We are expected to manage and cultivate our knowledge base and critique the current social and political context leading to insights into pervasive power relationships that serve a few elite while making life hard for many others. We call this *critical, reflective practice*. Values informing our work include security, equality, justice, rights, and peace, among many others (Brown, 1980; Brown & Paolucci, 1979; Kieren, Vaines, & Badir, 1984; McGregor, 2006, 2007).

Functional definition of families as social institution

We are champions of the idea that families can be defined both by what they look like (a structural definition: nuclear, single parent, co-habitation, divorced, et cetera) and by the functions they fulfil as the key democratic unit in society (a functional definition): (a) love, nurturance and morale; (b) physical maintenance and care of family members; (c) household maintenance and support; (d) social control and teaching of positive values; (e) addition of new family members and their relinquishment when mature; (f) socialization of children for their adult roles; and g) production (work and labour) and consumption. McGregor (2009a) tenders the idea of *becoming family literate* to advance our unique approach to working with and for families. She reinforces the unique Home Economics perspective that families are the basic democratic institution underpinning society—the cornerstone of civilizations, deserving of support.

Profession as a holistic system

Furthermore, Home Economics is unique in that its members conceptualize the profession as a *holistic system* (Kieren et al., 1984). Using a Venn diagram, they propose that intersecting circles represent three subsystems: (a) philosophy, mission, goals and principles; (b) knowledge, content and theory; and (c) competencies and practice. There is considerable overlap at the center where all three subsystems conjoin. Leadership happens at the core of the system (see also McGregor, 1998; McGregor & MacCleave, 2007). For this reason, Kieren et al. advocate that we should lead from this integrative core: the intersection of philosophy, theory/knowledge and practice. The integrity of our practice is insured using this unique, ethically responsible approach (McGregor & Gentzler, 2009; McGregor et al., 2008).

Emergent New Directions

Aside from the enduring eight dimensions of Home Economics practice set out in Figure 1 and the previous text, readers are invited to explore emerging suggestions for potentially unique lines of practice, as proffered by Benn (2009), McGregor (2006, 2008b, 2009a,2009b, 2010c,), Pendergast (2001, 2006) and Turkki (2005, 2006). These new dimensions to our practice include, but are not limited to: transdisciplinarity, transformative practice, integral leadership and practice, sustaining the life energy of the profession, authentic pedagogies, fostering intellectual curiosity and skeptical thinking, and positioning the profession beyond patriarchy. Other vanguard notions include Home Economics as carnivalesque, Home Economics at a convergent moment in conjunction with generational dynamics, home economists as expert novices who are new kinds of specialists, and home economists who have a respect for chaos and complexity and a different conception of time. Home economists have to trust that new insights will appear in this chaotic state and believe that they are self-organizing beings able to be stable while being open to change. New directions also include a focus on practical wisdom and on understanding of coherence (consequences), both leading to caring and responsible participants in life.

Questions and More Questions

The paper opened with three basic questions. What are the implications of distinguishing a whole profession from a collection of other humanities-related disciplines simply by leaving off the word *the*, and calling ourselves *Human Sciences*? Do we compromise or enhance the visibility and integrity of our professional and academic identity by using this name? Does choosing this name impact our ability to preserve the uniqueness of our profession and discipline? Many more questions emerged during the writing of the paper. Does using the name *Human Sciences* serve as a catalyst to move us towards a focus on the human condition? Does it help us return to the Lake Placid conceptualization of the profession as one with a focus on the full human experience, one that favours immediate environments and the social being (rather than just home and family)? By excluding natural sciences, is our clarion call for an interdisciplinary, holistic, integrative focus affected by the use of this name? Or, does the label open the door to a new conceptualization of *Human Sciences*, one that assumes interdisciplinarity can transcend the arbitrary division between the arts and the sciences and embrace the study a number of disciplines in relation to a central problem—the human condition?

Should we be concerned that we might be subsumed into *the* human sciences, meaning we could be incorporated into a more comprehensive category within the academy, already evidenced by the collection of program descriptors shared earlier in the paper? Is there a risk that home economists who value insights gained from all sciences will be alienated if they perceive the profession as aligned with *just* the human sciences? How does seeing ourselves aligned with one of the major sciences reflect our rhetoric that our practice involves three ways of knowing and acting (thinking): empirical (technical), interpretive and critical (see Vincenti & Smith, 2004)? If human problems can be best addressed with a balance of science, aesthetics (arts and meaning) and morals (Wilber, 2001), what message is sent when we intimate we are aligned with just the human sciences and not natural sciences? How do we bind relations with events and phenomena, as recommended at one of the founding meetings (in 1902), if our name conveys a disconnect from the sciences that empirically explore events and phenomena?

Implications of a Name and Future-Proofing the Profession

Any discussion of the import of a name ends up being richly philosophical as well as deeply pragmatic. Regarding the latter, most of the important interactions that people have are with others who know them well. If people are well known, others have better signals than a name. This reality means that when the name of our profession comes up in situations where people do not know much about us, they draw inferences from our name. This characterization happens for ideological reasons (Pendergast & McGregor, 2007). We have to be pragmatically cognizant of the inferences people draw from our name when they are seeking information about our university programs, our research, our policy influence and the like. Our academic and professional name truly matters.

Naming conventions—names matter

There are conventions that should be followed as we choose a name for ourselves. Brown and Paolucci (1979) explain that a substantive definition of Home Economics is a specification of its intellectual and ethical base. This argument could be extended to the name of the field. Any name we choose should establish a clear identity that is acceptable to those within the profession and intelligible to those outside (Bennett, 1978). As well, "the problems home economists choose to address should be ones where their solution makes a contribution to the future" (Brown & Paolucci, p. 34). From this perspective, our name should infer a deep concern for the human condition, which is a temporal concept. Embracing such an enormous responsibility—improving the human condition—means our name should inspire confidence within ourselves and in others, and our name should make us better prepared to become future-oriented (Turkki, 2005).

Names speak to people. They have power. Mentioning the name of the profession to strangers always evokes a reaction that deeply shapes future relationships with them. A shrewdly chosen name can convey to people the impression that the profession is serious and weighty. A well-chosen name can embody the premier contribution(s) the profession offers to the world (see Figure 1). An ill-chosen name can lead to public relations issues and needlessly alienate others from our purpose and the integrative mission of the profession. The right name will spark opportunities to offer persuasive descriptions of the work of the profession and its practitioners. A well-chosen name will be evocative, remaining in people's minds. Although a challenge for us, the right name will be free of negative associations. Right now, our conundrum is that family and home are not valued in today's society; consequently, neither are we. Not surprisingly, the name affects how practitioners in the field feel about their profession. If they love to say the name, if it resonates with them, they will readily name themselves and willingly associate with the profession, addressing, head on, any confusing and negative connotations (extrapolated from Yudkin, 2009). People who experience deep professional pride will be more inclined to see themselves as ambassadors of the profession (McGregor, 2007, 2008b).

As superficial as it sounds, names matter. Brown (1993), writing explicitly about the appropriateness of the name Human Ecology for the profession, suggests our name should reflect: (a) intellectual integrity, (b) a justifiable conceptual orientation to the field, (c) the agreed-to purpose of the field, and (d) what those in the field mutually understand and rationally agree to be their appropriate domain among other fields of study. The profession has embraced several names, including Home Economics, human ecology, consumer sciences, human development, family and consumer sciences, and recently, *Human Sciences*. Our professional conversations need to address whether these names, including the most recent label, meet Brown's criteria. Can people identify with, and proudly, unanimously proclaim out loud, "I am a Human Scientist", and know in their hearts that others will intuitively know what we are about—our unique contribution and approach to practice?

The profession has the potential to "develop as a solid, necessary structure—a weight-bearing pillar that undergirds society" (Horn, 1981, p. 21). The name of the profession will contribute to the ability of the profession to reach this potential. Bringing the issue of our name to the level of consciousness opens it to continuous, critical examination, a necessary development given the implications of changing the name again, this time to *Human Sciences*. "Home Economics is subject to a continuous process of change and redefinition" (Wahlen, Posti-Ahokas, & Collins, 2009, p. 34). Davis (2008) calls for a systematic, constructive dialogue to ensure a clear understanding of the field and its name. Names matter as we future-proof our future-oriented profession.

Biography

Sue L.T. McGregor is a Canadian home economist at Mount Saint Vincent University. Her intellectual work pushes the boundaries of consumer studies/home economics philosophy and leadership from integral, transdisciplinary and moral imperatives. A member of the IFHE's Research Committee, she also chairs IFHE's Leadership and Philosophy Committee. She is a Kappa Omicron Nu Research Fellow. Affiliated with 20 professional journals, she is Associate Editor of three home economics journals. Sue has delivered 35 keynotes/invited talks in 10 countries and published over 120 peer-reviewed publications, 11 book chapters, five monographs. She published 'Transformative Practice.' 'Consumer Moral Leadership' was published in 2010.

References

Amato, P. (2002). Hobbes, Darwinism, and conceptions of human nature. *Minerva—An Internet Journal of Philosophy, 6* (November). Retrieved December 30, 2009, from http://www.ul.ie/~philos/vol6/hobbes.html

Association for Humanistic Psychology. (2009). *Humanistic psychology overview.* Tiburon, CA: Author. Retrieved December 30, 2009, from http://www.ahpweb.org/aboutahp/whatis.html http://www.ahpweb.org/

Bailey, S. (2008). *The development of consumer sciences and consumer studies at degree level in higher education in the United Kingdom.* Unpublished doctoral dissertation, London Metropolitan University, England.

Benn, J. (2009). Practical wisdom, understanding of coherence and competencies for everyday life. *International Journal of Home Economics, 2*(1), 2–14.

Bennett, R. (1978). What is home economics? *Journal of Consumer Studies and Home Economics, 2*(1), 79–84.

Brown, M. (1980). *What is home economics education?* [mimeographed]. Minneapolis, MN: Minnesota University.

Brown, M. (1993). *Philosophical studies of home economics in the United States: Basic ideas by which home economists understand themselves.* East Lansing, MI: Michigan State University Press.

Brown, M., & Paolucci, B. (1979). *Home economics: A definition* [mimeographed]. Alexandria, VA: AAFCS.

Bullock, A., & Stallybrass, O. (Eds). (1977). *The Harper dictionary of modern thought.* NY: Harper & Row.

Cherniss, J., & Hardy, H. (2008). Isaiah Berlin. In E. N. Zalta (Ed.), *Stanford encyclopedia of philosophy.* Stanford, CA: Stanford University. Retrieved December 30, 2009, from http://plato.stanford.edu/entries/berlin

Davis, M. L. (2008). On identifying our profession. *International Journal of Home Economics, 1*(1), 10–17.

Dilthey, W. (1883). *Introduction to the human sciences.* Princeton, NJ: Princeton University. Retrieved December 30, 2009, as an e-chapter from the Marxist Internet Archives' website http://www.marxists.org/reference/subject/philosophy/works/ge/dilthey1.htm

East, M. (1979). Comments on the paper 'Home Economics: A Definition'. In M. Brown & B. Paolucci (Eds.), *Home economics: A definition* [mimeographed] (pp.136–142). Alexandria, VA: American Association of Family and Consumer Sciences.

Foucault, M. (1970). *The order of things: An archaeology of the human sciences.* NY: Random House (Vintage Books).

Fusa, S. (Ed.). (2004). *A philosophy of home economics.* Fukushima, Japan: Koriyama Women's University Press.

Horn, M. (1981). Home economics: A recitation of definition. J*ournal of Home Economics, 73*(1), 19–23.

International Federation of Home Economics. (2008). *IFHE position statement: Home economics in the 21st century.* Bonn, Germany: Author. Retrieved December 30, 2009, from http://www.ifhe.org/175.html

Kerka, S. (1996). Home economics by any other name. Alerts: Trends and Issues, pp. 3–4. Available at: http://www.calpro-online.org/ERIC/docgen.asp?tbl=archive&ID=A020

Kieren, D., Vaines, E., & Badir, D. (1984). *The home economist as a helping professional.* Winnipeg, MB: Frye Publishing.

Machamer, P. (2008). *Interpretation in art and the human and natural sciences* (Working Paper No. 2.20.08). University of Pittsburgh website. Retrieved December 30, 2009, from http://www.pitt.edu/~hpsdept/people/fac_pages/machamer/Interpretation,2.29.08.pdf

Marriage and Family Encyclopedia. (2009). *Home economics: Scholarship and practice, international contributions.* Retrieved December 29, 2009, from http://family.jrank.org/pages/785/Home-Economics.html

McFall, B. (2007). *Qualities of living: A platform for practice* [monograph]. East Lansing, MI: Kappa Omicron Nu.

McGregor, S. L. T. (1998). Reconnecting our professional community: A revitalization perspective. *Kappa Omicron Nu FORUM, 10*(2), 5–18. http://www.kon.org/archives/forum/forum10_2.pdf

McGregor, S. L. T. (2001). *Leadership for the human family: Reflective human action for a culture of peace* [monograph]. East Lansing, MI: Kappa Omicron Nu. Retrieved December 30, 2009 from http://www.kon.org/leadership/peace.html

McGregor, S. L. T. (2005). Professionalism in the new world order. *Journal of Family and Consumer Sciences, 97*(3), 12–14.

McGregor, S. L. T. (2006). *Transformative practice.* East Lansing, MI: Kappa Omicron Nu.

McGregor, S. L. T. (2007). Intellectual showcasing: Articulating the thinking behind our practice. *Nurture: Research Journal for Human Civilization, 1*(1), 2–7. Retrieved December 30, 2009, from http://chek.edu.pk/NURTURE2007.pdf

McGregor, S. L. T. (2008a). Epilogue. In T. Tuomi-Gröhn (Ed.), *Reinventing art of everyday making* (pp. 271–278). Frankfurt, Germany: Peter Lang.

McGregor, S. L. T. (2008b). Future proofing: Transdisciplinary ambassadors for the human condition [Invited response to 2008 IFHE Position Statement]. *International Journal of Home Economics, 1*(1), 31–37.

McGregor, S. L. T. (2009a). Becoming family literate: A new construct and platform for practice. *Journal of Family and Consumer Sciences, 101*(1), 60–66.

McGregor, S. L. T. (2009b). International conceptualizations of a 21st century vision of the profession. *Kappa Omicron Nu FORUM, 18(*1). http://www.kon.org/archives/forum/18-1/mcgregor.html

McGregor, S. L. T. (2010b). *Locating the human condition concept within home economics* [monograph]. Halifax, NS: Mount Saint Vincent University.

McGregor, S. L. T., & Gentzler, Y. (2009). Preserving integrity during home economics/FCS university program changes. *International Journal of Home Economics, 2*(1), 15–19.

McGregor, S. L. T., & Goldsmith, E. (1998). Extending our understanding of quality of living, standard of living and well-being. *Journal of Family and Consumer Sciences, 90*(2), 2–6, 22.

McGregor, S. L. T., & MacCleave, A. (2007). Analysis to determine Canadian, American, and Australian agreement about home economics/family and consumer sciences professional competency domains. Kappa Omicron Nu FORUM, 17(2). http://www.kon.org/archives/forum/17-2/home_economics_professional_competency_domains.html

McGregor, S. L. T., Pendergast, D., Seniuk, E., Eghan, F., & Engberg, L. (2008). Choosing our future: Ideologies matter in the home economics profession. *International Journal of Home Economics, 1*(1), 48–68.

Newman, J. M. (2003). Home economics. In S. Katz & W. Weaver (Eds.), *Encyclopedia of food and culture*. NY: Scribner. Retrieved December 29, 2009, from Gale Group Virtual Reference Library http://www.answers.com/topic/family-and-consumer-science

Oxford English Dictionary. (1989). Oxford, England: Oxford University Press.

Pendergast, D. (2001). *Virginal mothers, groovy chicks & blokey blokes: Re-thinking home economics (and) teaching bodies*. Sydney, AU: Australian Academic Press.

Pendergast, D. (2006). Sustaining the home economics profession in new times – A convergent moment. In A-L. Rauma, S. Pöllänen, & P. Seitamaa-Hakkarainen (Eds.), *Human perspectives on sustainable future No 99* (pp. 3–20). Savonlina, Finland: University of Joensuu, Faculty of Education.

Pendergast, D., & McGregor, S. L. T. (2007). *Positioning the profession beyond patriarchy* [monograph]. East Lansing, MI: Kappa Omicron Nu. http://www.kon.org/patriarchy_monograph.pdf

Pepall, J. (1998, April 3rd). Reinventing home economics in Canada and Africa. *International Development Research Centre Bulletin.* Retrieved December 29, 2009, from http://www.idrc.ca/en/ev-5536-201-1-DO_TOPIC.html

Pereira, A. (2008, June 9). Home economics for a new generation. *University Affairs.* Retrieved December 30, 2009, from http://www.universityaffairs.ca/home-economics-for-a-new-generation.aspx

Peterat, L. (2001). Radicalizing and renewing home economics for the future. *Canadian Home Economics Journal, 51*(1), 30–33.

Saybrook Graduate School and Research Center. (2009). *Human science.* San Francisco, CA: Author. Retrieved December 30, 2009, from http://www.saybrook.edu/academics/human_science.asp http://www.saybrook.edu/academics/human_science/PhD.asp

Steiner, W., & Liberman, M. (2001). *Human nature in the humanities and human sciences* [course notes]. University of Pennsylvania, Department of Linguistics website. Retrieved December 30, 2009, from http://www.ling.upenn.edu/courses/hum100/intro.html

Tuomi-Gröhn, T. (Ed.) (2008). *Reinventing art of everyday making*. Frankfurt, Germany: Peter Lang.

Turkki, K. (2005). Pre-professionals' perceptions of home economics in Finland. *International Journal of Consumer Studies, 29*(3), 273–282.

Turkki, K. (2006). Sustainable development: Our common vision: Creating new ways of knowing, being, relating and practising. In Y. Kurulu & Provisional Program Committee (Eds.), *Proceedings of First International Home Economics Congress* (pp. 43–49). Ankara, Türkiye: Ankara University, School of Home Economics.

Twyla, S. (1971). Utilizing affective modes in developing selected teaching competencies. In J. Baird (Ed.), *Home economics teacher education: The state of the art* (pp. 26–30). Washington, DC: American Home Economics Association.

University of Sussex. (2008). *Human sciences.* Brighton, England: University of Sussex web site. Retrieved December 30, 2009, from http://www.sussex.ac.uk/Units/publications/ugrad2008/subjects/Human+sciences

Vaines, E. (1997). Exploring reflective practice for home economics. *People and Practice: International Issues for Home Economics [PPIHE], 5*(3), 1–13.

Vaines, E., & Wilson, S. (1986). Professional action: Using the theoretic framework of practice. *Canadian Home Economics Journal, 36*(4), 153–157.

Vincenti, V. (1997). Home economics moves into the twenty-first century. In S. Stage & V. Vincenti (Eds.), *Rethinking home economics* (pp. 301–320). Ithaca, NY: Cornell University Press.

Vincenti, V., & Smith, F. (2004). Critical science. J*ournal of Family and Consumer Sciences, 96*(1), 63–72.

von Wright, G. H. (2004). *Explanation and understanding.* Ithaca, NY: Cornell University Press.

Wahlen, S., Posti-Ahokas, H., & Collins, E. (2009). Linking the loop: Voicing dimensions of home economics. *International Journal of Home Economics, 2*(2), 32–47.

Wilber, K. (2001). *The theory of everything.* Boston, MA: Shambhala.

Yamauchi, T., & Markham, A. B. (2000). Inference using categories. *Journal of Experimental Psychology, 26*(3), 776–795.

Yudkin, M. (2009). *Why business names matter.* Goshen, MA: Named At Last. Retrieved December 30, 2009, from http://www.namedatlast.com/naming3.htm

Zheng, S. (2009, March 5). Prof charts evolution of human ecology college. *The Cornell Daily Sun.* Retrieved December 30, 2009, from http://cornellsun.com/section/news/content/2009/03/05/prof-charts-evolution-human-ecology-college

IFHE Congress Keynote and Plenary Papers

Collective empowerment of the home economics profession— Equipping the profession with advocacy, futures creation and leadership

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Abstract

From across the regions of the International Federation for Home Economics, professionals peek into the future of the home economics profession and envision strategies that seek to retool practitioners for the socially diverse and ecologically sensitive, globalized environment in which families live and work. Critical thinking, introspection in respect of a professional identity as well as decision-making are practical tools that promote self awareness and are promoted for refinement as a first step in promoting advocacy as an important new competency for home economics practitioners in the future. Creating a future that will overcome and transcend the daily challenges of society requires reflection and professional action. Collective empowerment that pulls together professionals and allied professionals, reinforce the need for meaningful collaborations in meeting the need for improved quality of life for individuals and families. Learning to be effective leaders is proffered to be one way of asserting professional visibility and to set excellent examples among stakeholders to become more self reliant in effecting meaningful changes in their everyday lives. The ideas presented are meant to be the initiation of conversations at different levels in respect of developing the home economics profession for the 21st Century.

Introduction

Dr. Geraldene Hodelin

This plenary is about the future. It is about us as world home economics professionals critically examining strategies for reinventing the profession for the next 100 years. During this World Congress the IFHE has put on a show of reflection and celebration focusing on the last 100 years, for its members and the world. We have mounted a show that has made profound statements about our pride in our heritage of service of research, of social impact and of individual expressions of professionalism and of our connectivity and networking across borders, across cultures and across disciplines. We have heard from the leaders, from our youth, from and about our institutions of higher learning and about those that provide us with the opportunities to practice our skills and our understandings of the human conditions.

In this final plenary, we are about the future. We are about moving forward with energy, with professional confidence and as a team. Five persons will combine their voices and provide directional signs for journeying towards our professional goals and to begin the next century of work in definitive ways. Not only are we concerned about the forward movement of the home economics profession globally but about the movement of the International Federation for Home Economics and its ambitions to include more representatives from some of the more 'silent' countries in the five continents of the world.

While our panelists will respond to specific sub-themes of our Plenary theme, in their presentations, I crave your indulgence in placing on the discussion table, a few questions that I believe should be included in any conversation that we will have about our future.

- What is the profile of the profession in the next 10-20 years?
- In what ways can and should the International Federation for Home Economics become an influential force in mediating family focussed issues globally?
- What are the desirable skills of the successful home economics professional in a modern globalised world environment?
- What are the emerging needs of families and communities that will demand the retrofitting of the home economics curriculum for individuals and for practitioners?
- How can IFHE sustain its professional integrity as a world body representing professionals who often challenge the name 'Home Economics'

Time will not allow me to fully develop a thesis around these issues in this paper but please keep *your* eyes on our website. These and other themes will be explored and posted on the IFHE website regularly for your critical feedback and continued conversations in your chosen professional setting in a timely fashion.

Let me now turn to our panelists who will energize your thinking about the future of Home Economics and the IFHE under four sub-themes. The themes to be discussed include:

1. Collective empowerment: Equipping our profession for the future
2. Advocacy, the new competency for home economics
3. Equipping the Profession for Future-creation
4. Leadership for Empowerment in the 21st Century

Let us now hear the voices of our colleagues from the different regions of the IFHE as they begin the conversation about our future.

Collective empowerment: Equipping our profession for the future

Dr. Tae Myung Yoo

We see ourselves as individual home economists as well as group members of professional home economics organizations. When we as a group try to position the future direction for our profession, we seek what we should be able to do and what our clients are to be able to do in the future. In this plenary session, the panel attempts to put forth ways of equipping our profession for the future. For this to happen convincingly, in my view, the notion of our collective empowerment as a group of home economics professionals and the empowering of those who serve the profession will have to take place and this perspective forms the basis of my presentation on this panel.

Empowerment: Its meaning and levels

During the past several decades, empowerment has been a common theme in many disciplines. Substantial work in management and business, in health related fields, social works, politics, philosophy, and education dealt with the empowerment issue regarding its concepts and definitions, levels of intervention, process, and assessment. Yet, the construct empowerment has been used with different meanings and a consistent definition of the concept has not been clearly arrived at.

Baldwin (1990) questioned, "Is empowerment a state so that people are more or less empowered or a process involving growth?" Vander Henst (1997) and Williamson (2005, recited) noted that empowerment might be conceptualized as either a process or an outcome. As Zimmerman (1995, p. 585) pointed out, "empowered outcomes are one consequence of empowering processes". Each of the following definitions of empowerment represent process and outcomes:

> *Empowerment is a social process of recognizing, promoting and enhancing people's abilities to meet their own needs, solve their own problems and mobilize the necessary resources in order to feel in control of their own lives (Gibson, 1991, p. 359).*
>
> *Empowered individuals see themselves as having freedom and discretion* (self-determination)*, as having a personal connection to the organization* (meaning)*, as confident about their abilities* (competence) *and able to make a difference in the system in which are embedded* (impact) *(Sprietzer and Quinn, 2001, p. 14).*

Wall and Rinehart (1997) identified recurring themes of empowerment in educational settings. These themes are decision-making, autonomy, professionalization, status, impact, and self-efficacy. They match the criteria for assessing empowerment in the most commonly used School Participant Empowerment Scale developed by Short and Rinehart (1992).

Empowerment is researched in three levels or dimensions. The levels are identified in different ways by researchers. They are described as individual, group/team, and organization (Lindsley, Brass, and Thomas, 1995) and as psychological, organizational, and community (Zimmerman, 2000). Friedmann (1992) refers to those diverse levels of empowerment as psychological, social, and political empowerment respectively. The levels are interrelated and interdependent, therefore, one cannot be fulfilled without the help of the remaining two (Park, 2001). Group/team, organizational, community, and political empowerment in the literature correspond to collective empowerment.

Collective empowerment is guaranteed under the security of individual empowerment. Ohio's Teacher-Leader Institute model is a good model for professional community building that we can benchmark, which combines individual teacher empowerment and collective teacher team empowerment. This model gives an impetus to home economics teachers to who wish to transform their own professional practices and reach out to other teachers to build a professional learning community. The Institute is designed to "facilitate the development of the critical science and related concepts and skills …" and to "enhance the self-transformative, self sustaining processes of educators in a democratic professional community …" (Laster and Boggs, 1995, p. 48). Five key interacting elements of its activities are a combination of traditional, phenomenological and critical learning methods, team building and learning, peer teaching and critical friends, action research, and critical moral reflection (pp. 51-54).

Emancipatory nature of empowerment in home economics

From early 1990s the term *empowerment* has been explicitly used in the literature of home economics, although it was implied in most of Brown's (1979, 1980, and 1985) work and even in the Proceedings of the Lake Placid Conference on Home Economics (1898-1908) a century ago. Baldwin's (1990) work on 'family empowerment,' Vaines' (1991) 'empowerment orientation,' and Vincenti's (1991) 'empowerment: its history and meaning' to name a few. Special issues devoted to empowerment are Kappa Omicron Nu's *Forum* Vol. 6, No. 2 issue on 'empowerment', Kappa Omicron Nu's *Forum* Vol. 8, No. 2 issue on 'building community,' yearbook series of Teacher Education Section, AAFCS(1992, 1997, 1998, and 1999) on 'transforming practice,' 'ethical action,' 'Inquiry into thinking,' and 'critical science perspective' and more. Empowerment became a key concept stated in the mission of AHEA's (1993), strategic direction of AAFCS (1999), and position statement of IFHE (2007).

Sound Bite: Empowering individuals, strengthening families, and enabling communities … (AHEA, 1993)

AAFCS is to effect the optimum well being of families and individuals by empowering members to act on continuing and emerging concerns … (AAFCS, 1999)

Home economists are concerned with the empowering and wellbeing of individuals, families and communities … (IFHE, 2007)

Unlike the technical and managerial nature of empowerment in the literature of various disciplines and fields of study, the nature of empowerment in home economics is practical and emancipative. In most cases, empowerment in home economics is conceptualized based on the critical theory and is interpreted with critical science perspective. From a critical science perspective, Baldwin (1990) raises our consciousness to be critically aware of two dimensions of empowerment "as freedom from internal constraint (prejudice, lack of insights and knowledge) and as freedom from external constraints (social-political-economic constraints)." (p. 3)

Brown (1980) defines home economics as a personal service profession. One of the distinguishing characteristics of the home economics profession is that it is toward action and doing something of personal service to individuals, families, and society. The personal service is to be served in the interest of those served and to bringing about changes in them. Here we need to pay attention to the reciprocal relationship between professional and client. It should not be a linear top-down relationship between empowering profession who delegates power and powerless client. Rather it should be a reciprocal one. As Staples (1990, p. 29) asserts, "Power is not likely to be handed to have-not groups in our society. Power must be developed or taken by the powerless themselves, as well as being granted. It is possible for individuals or groups to empower themselves rather than merely being the recipients of power bestowed by others". We as a personal service profession should "enable individual and families to build and maintain systems of action which lead to maturing in individual self-formation …" (Brown and Paolucci, 1979, p. 23).

The client is not a passive recipient of service provided by a prescriptive home economics expert but an active subject who is a self-formative and self- empowered member of life-world. We should also consider individuals and families as part of the public. Life-world consists of individuals and the public, according to Habermas (1984 and 1987), and is colonized by economics and political systems in modern society. In complex socio-culturally interweaved society, the role of public, as collective empowering agent is more crucial for decolonization of life-world through communicative action than ever.

Call for collective action

When we seek collective empowerment for our profession as advocates, future creators, and leaders, we presuppose our profession as a democratic collective neither as an individualistic collective nor as a totalitarian collective. This assumes that we as a democratic collective share, as Brown (1993) asserts, concepts, beliefs, values, vision, and goals, even though she argued that the home economics profession lacks a collective identity, and often holds a view of individualistic or totalitarian collective professional community. However, I strongly believe that we share common values, vision, and goals of home economics, yet we are not fully empowered to carry out planned collective action according to our collective identity. Empowerment in the home economics profession is often conceptualized with the notion of professional development, advocacy, leadership, and transformative practice.

So in light of the above, I affirm that as future oriented professionals, poised at the crossroad of modernity and our rich history of professional activity, I call for the following collective action to equip ourselves to navigate the future

1. Be critical of forces that hinder empowering our clients: For professional development/ transformative practice, it is a primary competence for us 1) to understand social reality and root causes of undermining human well-being, and 2) to be able to envision future direction for professional practice.

2. Raise the visibility/profile of our profession as empowering agent with collective identity: For advocacy/policy maker role, we need to collectively act according to our proclaimed mission and demonstrate our will to carry it out. It is crucial for the public to know who we are, what we can do, and where we are. Specific strategic action

planning for collaborating with other organizations within home economics and cooperating with international organization outside our profession is urgently needed.

3. Develop viable curricula/programs that can foster collective empowerment: For leadership development, pre/in-service educational programs for home economics professionals should organize contents and learning process to enhance the role of transformative leaders in professional community and society. They may benchmark Ohio's Teacher-Leader Institute and Kappa Omicron Nu's Reflective Leadership course.

We now turn to ways to empower our profession through advocacy, and some new competencies for the home economics profession that will influence leadership and other professional actions for the future.

Advocacy: The new competency for the home economics profession

Dr. Mary Magee

Advocacy

Advocacy as the new competency for home economics profession for its future development and to meeting emerging needs of individuals and families in their everyday lives will necessitate the development of other supportive skills. These skills will include:

1. Building a special kind of professionalism – "adaptive experts"

2. Professionals sensitive to the moral, ethical dimensions of their work and with due regard for the intrinsic value of Home Economics

3. Home Economics profession as a catalyst for change at national, organisational and international levels

4. Critical reflection as a tool for personal advocacy, developing leadership and lifelong learning attributes, promoting individual freedom and moral responsibility in addition to practical and technical competencies.

5. Futuristic orientation – practical direction for the Home Economics profession

Reflection and professional identity

- Identity - linked to personal / professional development and as a key element in sustainable change and in building "learning communities".
- Clear vision of the challenges and expectations of the Home Economics profession in the 21 century and beyond. Necessity for intrinsic motivation, ability to engage in disciplined experimentation and incisive interpretation of complex events.

- Critical reflection provides the vehicle by which individuals acquire the emancipatory goal of self – learning, promoting analytical, reflective habits and attitudes. Rather than reliance on disciplined – based knowledge, the Home
- Home Economics profession needs to become increasingly characterised by "evidence – based practice" requiring change and commitment to development and renewal thus portraying the image of the professional as learner, integrating technical skills, critical reflection and inquiry.
- Reflection then places emphases on self – learning through questioning and investigation leading to the continuous development of self – understanding. Such reflection allows an individual to free themselves of habitual ways of thinking in order to transform perspectives and to establish beliefs in the form of evidence and rationality. Developing self – awareness leads to self – knowledge and pedagogical thoughtfulness. Reflection at this level involves technical, practical and critical concerns.

Reflection on identity

An individual cannot learn to think critically until he/she sets aside their own visions of the 'truth' and reflects on alternatives. Developing new structures of thought requires a re-assessment of personal values and beliefs. The professional challenge for Home Economists in the 21 century and beyond will be influenced not only by the environment in which they work but also by their own 'world – view'. When one's position is grounded in a well-developed and carefully conceived philosophy of practice, it provides vision, passion and a sense of moral purpose.

How an individual makes sense of his / her discipline, their issues and the problems they choose to focus on and the questions they raise to address these concerns, relate to personal values, interests and commitment. Developing a critical mind, one that is open to alternatives and acknowledges the conceptuality of knowledge – is the quintessential educational process, an arena of critical thinking in which an individual's sense of agency is nurtured.

Home Economics professionals need to develop new visions and paradigms for change. This calls for reflective, self – critical, inquiry – driven practice at both an individual and organisational level. The model of reflection proposed incorporates technical, practical and ethical, moral concerns into the educational discourse on reflection. Thus enhancing the capacity of Home Economics professionals to transform the nature of practice to foster a more just and humane society.

Equipping the profession for futures creation

Dr. Chui-Fui (Joyce) MOK,

What is futures creation?

My own definition of futures creation is the constant regeneration of the home economics profession. Future proofing the profession is being able to have a continuous future in not just academia but also in the everyday lives of individuals, families, communities and societies. It also implies creating a future for the profession with a repertoire of strategies to adapt, grow, and lead the home economics profession into an increasingly sophisticated and globalised future.

This constant regeneration is a dynamic process of reinventing the profession, which involves creativity and ingenuity. This is to ensure the succession of socially relevant home economics professionals, and the continuance of this increasingly important profession and academic discipline to advance its mission.

What does future creation mean to home economics?

It means a methodology, a system for the profession to ensure and enrich itself for the future. It is also to empower the profession. By creating a means of ensuring and enriching our future, we also empower ourselves to progress and adapt and utilize our resources both human and academic effectively.

It involves new and creative methods in pedagogy, teaching and training. The home economics field cannot be left behind, as has happened in other disciplines of sciences. The world is becoming systemic, and holistic. There is now very little to separate the disciplines of geography, history, economics, sociology, psychology, sciences and home economics. Thus, we should seek to develop an integrated pedagogical framework for our discipline, as these demarcations between the various disciplines are becoming blurred. If home economics professionals compartmentalize the discipline, we will end up marginalizing it in the future. We need to embrace various methodologies, approaches and discourses and build a future pool of professionals that can maintain this new approach and thinking.

The Home economics discipline needs future creation in all aspects of the field, just as every single aspect of our daily lives have changed rapidly over the last few generations. We must move forward, to keep a step ahead of changing trends, lifestyles and patterns of consumption, in an increasingly modern and complex world. We need to be keeping up with new areas and developments in the field, and thus we would engender the opportunity for continuance and even relevance into the future

Home economics can be seen as a discourse on the financial economics of consumption, the study and narratives of home based work, the effects of culture and change on the household and its dialectics, and much more. This discourse is underpinned by the work and research of the home economist. Crucially, this work is given credence and weight by the expertise of the professionals in their respective fields. In order to have future creation as part of this discourse, it is most important to equip home economics professionals with knowledge and methodology in research, analysis, predicting the future, adapting to it and engaging it in a scholarly manner. With knowledge, comes the power to create, recreate and regenerate this discourse. Consequently, with future creation, comes empowerment.

As professionals we need to recognize that the world is becoming smaller and smaller each day. We know and understand many trends occurring around the world, via the advances in global communications. However, these changes and trends are by no means homogenous. For example, today's social and community environment in Cambodia is perhaps what it was like in Singapore a few decades ago. Thus, we cannot assume as before that there is a middle ground for norms and standards or even methodologies.

This awareness also presents many opportunities for future creation. By understanding the present, we can sometimes predict the future, and even compare societies and their progress or lack of. Knowledge, therefore, through the greater exchange and flow of ideas can be a crucial tool of empowerment for the home economist.

With greater knowledge of self and our environment, future creation can help us as professionals to identify future possible trends such as the over-population of urban areas, and the accompanying social problems and challenges. Global hunger and environmental degradation evoking catastrophic changes come to mind as needing immediate attention. On the micro level, we just need to consider how changes in mobile telecommunication technologies have greatly transformed family interaction processes, daily planning and even communal living, to visualize the impact of technology on the future of family and households. Identifying these trends, helps us to analyze them, and in doing so, perhaps provide solutions. Society today has many demands and needs many solutions, and our professional future is often simply dependent on us providing these solutions.

This prospect of future creation is what drives us on our quest for greater knowledge and empowerment, to take advantage of the greater opportunities present to define, change, adapt and build upon the current discourse of home economics. Nevertheless, we also need to set our standards high in the future creation process. In fact, our research goals should even be deliberately ambitious and difficult to achieve, and often seem almost impossible. But tackling those difficult, challenging future trends and demands opens up the future and eventually brings our goals within reach.

A place to begin

Perhaps first we need to imagine what the future holds for us by asking questions such as: What kind of new lifestyles will people enjoy in the future? What services and products will people want to consume in tomorrow's society? What are the current trends in technology and research that are needed to provide solutions? That is where the future creation process starts.

We must think hard about what future awaits us, what new questions we must ask, and how we can be empowered to provide information, solutions and even encouragement for our societies and fellow professionals.

This first step sets the stage for predicting the future for home economics practices, advocacy, competency and even areas of empowerment that can be attained. Future-creation can provide greater professionalism, equipping professions with knowledge and methodology to cover future trends of our primary clients. A useful methodology can be creativity-training courses that seek to develop the natural creativity of home economics professionals by introducing them to new stimuli and a range of powerful creativity techniques to plan effectively for the long-term future.

Good ideas are not enough; they need to be implemented to help build a culture that truly encourages and rewards creativity as well as encourage constructive thinking about approaches to home economics. I believe that our very survival as a profession and a field of study is dependent on this thrust, given the rapid changes occurring in our respective worlds.

A second step

Home economics is already a holistic field, as, increasingly, in our modern complex and increasingly globalised world, the lines are now blurring in all our definitions and norms, such as work within and beyond the home. It is the positioning of this discipline within the larger structural discourse of the human sciences that needs to be better analyzed and debated on, to better prepare for the future that could be a second step in the future creation process. Home economics should not be a separate discipline, but rather a big part of the social and living science, as after all, everything today is interconnected. It would not make sense in the future to continue to compartmentalize the areas of home economics. Our profession should be prepared to offer and create a future discourse on home economics in a truly holistic and systemic way.

Future creation as a goal as well as an instrument is a vital methodology to be used in equipping home economists for the future. The means to equip the professional with future creation skills and competencies is simply to be aware of it as a need to be met, to understand it and utilize it and strategies.

Finally, we need to believe that we can create the future, not just predict it. We can use our rich academic background and research and everyday work, to envision what kind of future world we would all be living in, and the changes for families, communities and societies. Future- creation can help us to see what kinds of life skills, information and concepts families and communities in the future will require; what will be of values and social needs should be encouraged in the future, and what we as professionals must understand and adapt to in order to help enrich the lives of all peoples everywhere.

Having just broached the conversation on future creation for our profession, let us now turn to another aspect of our future development, leadership and empowerment.

Leadership for empowerment in the 21st century

Dr Sidiga Washi

Our history as a profession has taught us that Home economics has been a progressive field that brought science to farm living, reformed and restructured the everyday living in homes and created an academic and vocational discipline for study in higher education. The field has traditionally attracted more women than men and therefore has incrementally improved the opportunities of women to self develop and for them to address the development of homes, families and communities. Not least in the areas of human development is the rise of our professionals to leadership positions in public education, academia, government and industry and as emerging entrepreneurs (Vaines, 1990).

In celebration of the IFHE Centennial, we have emphasized how home economics worldwide, served as a critical bridge towards women's leadership for empowerment. Home economics helped women and families to apply science and technology in their work inside the home, which has saved them time and physical efforts. Furthermore, the development of the discipline of Home Economics and the progression of name changes and curricula development to cope with the globalization movement is an attempt to educate ourselves as well as observers about the importance of applying scientific principles and research findings to improve the quality of life in and outside the home.

The field of home economics in today's world is helping us as professionals to better deal with our day to day complexities in a leadership manner that exerts change and paves the way for a better quality of life and that leads to greater sense of empowerment. Our field is growing in new directions, and faces new challenges, new ways of dealing with issues in a new mind and skill set. As professionals in home economics, we should better be prepared to understand and affect the profound change in the nature of families and the context within which they live. McGregor (1997) states that, the transformation that is occurring in our societies requires adopting new ways of seeing families in relation to the world and in changing the way we serve families. We need to advocate for a fundamental transformation in our belief system, in the way we practice, and the knowledge base we use to practice. Adopting a practical problem solving approach to serving families provides a perspective from which we can enlighten ourselves and family members about the ways in which the larger society has created conditions, which make daily life difficult. It enables us to conceive that all individuals are capable of participating fully in working towards changes for the better for all (Brown, 1993).

The leadership paradigm in our field requires moving beyond providing the technical and theoretical information to help families approach their problems and struggle to solve them. This can be facilitated by embracing a critical, reflective approach to practice which means we have to seriously ponder and deliberate on meanings, norms and values leading to revelations, which direct our ethical actions (McGregor, 1997).

Globalization is yet another lens to use to look into our profession and bring into focus the aspects of global systems, issues and problems, history, and human and universal values. Through this lens, we see clearly that individuals are better able to understand and influence their condition in the community and the world. Often, individuals and families make many vital resource management decisions without due consideration of the implications on the future, other people or the environment. The global environmental changes that result from human interaction with their ecological system necessities our leadership perspectives and informed wisdom to access, generate, friendly use and restore resources to meet basic needs of families globally.

Leadership

Leadership is about exerting positive change to enable individuals and families to take actions and create situations. In this sense, families can be empowered to take control of their lives, using the appropriate coping skills, values, meanings, attitudes that will help them to understand the varied context and overcome the rapid changes in their today's life. On the other hand, leadership in home economics provides direction for transformation based on principles, adaptation to situations and sharing power while strengthening people.

Families in all cultural contexts should be able to manage their own resources and our role as leaders is to enable them to improve their quality of life through this resource management process (Goldsmith, 1996). As professionals, we then stand a better chance of enabling families to change their resource and change management styles by utilizing fundamental scientific and developmental knowledge of home economics in a contextual way. This is empowerment.

Empowerment

Empowerment is about helping people to acquire principles that are useful to them as they solve their problems and reach decisions on their own without being influenced by external factors or adopting other people's solutions. Empowerment is about social transformation and better quality of life for our families. An important and supportive attribute or skill for home economics facilitators is our ability to influence public and institutional polices that support families' economic and social empowerment.

Another key attribute to our leadership empowerment model is the need for us as home economics professionals to rise above our cultural differences. This action is in order to understand and support each other; to upgrade our knowledge and skills required to do our professional work; and to be transparent to self and others so that we are clearly understood as we seek to help others.

People need to want to change, be able to change and be supported if they are to move from a disempowered to an empowered state. As professionals, we all need to take a personal inner strength inventory and help families do the same. As practitioners, we also need to appreciate the disadvantaged and help them exercise full internal personal power to enable them, whenever possible, to have control over their lives or situations. A practitioner who is empowered can work to change personally and then to help change the profession and families; an individual or family who has been empowered can work to change the world (McGregor, 1997).

In conclusion, as home economists we cannot effectively lead and empower families to cope with, adapt to, and affect change if we do not change ourselves. Our personal and professional obligation is to, make the commitment to accepting change that may be necessary, in varying degrees and over time. We should strive to accept those changes that make it easier for us to critique, to embrace and then learn the new ways of doing the right things as individuals and families, until it becomes our new mode of practice for a better quality of life in our global community.

Summary and conclusion

Dr. Geri Hodelin

Anticipating the future is an exciting adventure. The authors of this paper have dared to project that home economics professionals are not only required to build on the past but to acquire new skills and competencies in order to remain relevant to our stakeholders and allied professionals. Each panelist suggest that in addition to building skills to help others, as home economists we should not forget our own personal growth and development and that personal awareness of the constantly changing environment in which we live and work must be one the critical areas of development.

Much of what we discussed in this plenary are still to be developed because time is the enemy here. Our intention is to begin the dialogue on our future-creation and leadership –building because all of us must participate in this process. It is our intention to urge you to continue this conversation within and across regions; within self and with colleagues; by our research and our classrooms and boardrooms. We would like the critical reflection identified by the authors, as a critical developmental skill can become the effective instrument of positive change for the future development of our Federation.

References

American Association of Family and Consumer Sciences (1999). *AAFCS strategic direction for 2000-2005*. AAFCS, Alexandria, VA.

American Home Economics Association (1993). *Positioning the profession for the 21st Century.* AHEA, Alexandria, Va.

Baldwin, E.(1990). Family empowerment as a focus for home economics education. *Journal of Vocational Home Economics Education, 8*(2), 1-12.

Bandura, A.(1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychologist Review, 84*, 191-215.

Bandura, A.(1986). *Social foundation of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice Hall.

Brown, M.M (1993). *Philosophical studies of Home Economics in the United States*. Michigan State University.

Brown, M.M. (1980). *What is home economics*. Minneapolis: Minnesota Research and Development Center for Vocational Education.

Brown, M.M. and Paolucci, B.(1979). Home Economics: A definition. Washington, D.C: AHEA.

Conger, J.A. & Kanungo, R.N.(1988). The empowerment process: Integrating theory and Practice. *Academy of Management Review, 13*(3), 471-481.

Friedmann, J.(1992). *Empowerment: The politics of alternative development*. Cambridge, MA: and Oxford, UK: Blackwell.

Gibson, C.H.(1991). A concept analysis of empowerment. *Journal of Advanced Nursing, 16*, 354-361.

Goldsmith, E. (1996). *Resource management for individuals and families.* Minneapolis, MN: West Publishing.

Habermas, J. (1984). *Theory of communicative action, Vol. 1*. Translated by T. McCarthy. Boston, MA: Beacon Press.

Habermas, J. (1987). *Theory of communicative action, Vol. 2*. Translated by T. McCarthy. Boston, MA: Beacon Press.

IFHE(2007). *IFHE Position statement: Home Economics in the 21st century*. The Think Tank Committee of IFHE.

Laster, J.F. and Boggs, H, (1995). Building professional learning communities: Ohio's Teacher-Leader Institute Model. *Forum, 8*(2), 47-56.

Lindsley, D. H., Brass, D.J., & Thomas, J.B.(1995). Efficacy-performance spirals: A multi-level perspective. *Academy of Management Review, 2*0(3), 645-, 678.

McGregor, S. (1997). Embracing a new future: A leadership imperative. *Journal of Family and Consumer Sciences, 89*(3), 12-18.

Park, W. (2001). How a western management concept is transferred to Korea: The case of empowerment, *Korean Journal of Business Research, 30*(4), 1265-1289.

Proceedings of the Lake Placid Conference on Home Economics (1899-1908). Washington, D.C: AHEA.

Short, P. M. & Rinehart, H.S.(1992). School, participant empowerment scale, assessment of level of empowerment within the school environment, *Education and Psychological Measurement, 52*(4), 951-961.

Spreitzer, G.M. (1995). Psychological empowerment in the work place: Dimensions, measurement, and validation, *Academy of Management Journal, 38*(5), 64-78.

Spreitzer, G.M. & Quinn, R.E.(2001). *A company of leaders: Five disciplines for unleashing the power in your workplace*. San Francisco, CA: Jossey-Bass.

Staples, L.H. (1990). Powerful ideas about empowerment. *Administration in Social Work. 14*(2), 29-42.

Thomas, K.W. & Velthouse, B.A.(1990). Cognitive elements of empowerment: An interpretive model of intrinsic task motivation. *Academy of Management Review,15*(4), 666-681.

Vaines, E. (1990). Philosophical orientations and home economics: An introduction. *Canadian Home Economics Journal, 40*(1), 6-11.

Vaines, E. (1993). An empowerment orientation for home economics. *Forum, 6* (2). 21-25.

Vincenti, V.B. (1993). Empowerment: Its history and meaning. *Forum, 6*(2). 21-25.

Wall, R. & Rinehart, J.S.(1997). *School-based decision making and the empowerment of secondary teachers*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL, March 24-28.

Williamson, L.M. (2005). *Home health care nurses' perceptions of empowerment*. Doctoral Dissertation. University of Delaware.

Zimmerman, M.A.(2000). Empowerment theory: Psychological, organizational and community levels of analysis. In Rappaport, J. and Seidman(eds)(2000). *Handbook of community Psychology*, New York: Kluwer Academic.

Book Review: Resource management for individuals and families

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Member of Home Economics Institute Australia

Goldsmith, E. B. (2010). *Resource management for individuals and families* (4th ed.). Boston: Prentice Hall.

The fourth edition of *Resource management for individuals and families* is an updated text for today. Written by Elizabeth B. Goldsmith, highly respected Professor of Family Resource Management and Consumer Economics at Florida State University, this text doesn't disappoint. The current global financial economy is the backdrop to a book rich in management theory, concepts and principles. With a strong home economics philosophy evident, the text contains a wealth of information relevant to the management challenges faced by individuals and families today.

This comprehensive textbook is arranged into four parts. The first part looks at management history and theory, both past and present. Part Two covers the essential concepts and principles of management including values, attitudes, goals, motivation, resources, decision making, problem solving, planning, implementing, evaluating, and communication. Part Three focuses on the application of these management principles to factors such as human resources, time, work, family, stress, fatigue, environmental resources, and finances. The final part, Future Challenges, looks ahead and considers management as it relates to changes and advances in technology, family, home and global situations. The book covers these topics by relating them to a wide range of current issues relevant to individuals and families, for example, ageing, homelessness, poverty, immigration, culture, children, employment.

The content is based on both current research and classic economics and home management texts. Goldsmith demonstrates different management theories and models by applying them to common and current family contexts. This application of the resource management process to everyday situations makes the text highly relevant to students of home economics. Whilst the text is written from an American perspective, Goldsmith has presented information applicable to individuals and families worldwide. Although not necessary, it could be an interesting activity for instructors or students to research facts, figures and examples from their own countries to complement and supplement the US data presented.

The book is written in a detailed, articulate and logical format that is both interesting and easy to read. The theory is supported with clear explanations, appropriate quotations and descriptive examples to illustrate the points made. Graphs, diagrams, flowcharts and photographs also contribute to the clarity of the information. In addition to comprehensive content, the book contains a range of features to enhance understanding of the topics and aid study. As well as a summary and a list of key terms, each chapter has sections detailing relevant e-resources, references and further reading suggestions. Review questions at the end of the chapters and critical thinking activities scattered throughout the text encourage student reactions, thoughts and discussions based on the theory and material presented. Whilst the book is not bright, shiny and full of glossy pictures as many textbooks are these days, this text appeals in its black and white simplicity; it lets the content speak for itself.

The fourth edition of *Resource management for individuals and families* is an excellent text to introduce management theory to students. Elizabeth B. Goldsmith's interesting writing style clearly details the concepts of management as they relate to family and everyday life and living. It is a textbook that would be a valuable asset to any course in home economics.

Book Review: A guide to healthy eating in old age

Dr Vassiliki Costarelli, BSc, MSc. PhD, R.Nutr.

Harokopio University

Puri, S., & Khanna, K. (2009). *A guide to healthy eating in old age.* Delhi: Institute of Home Economics, University of Delhi.

Older adults are more prone to poor nutrition and malnutrition in comparison to younger adults mainly due to their affliction with a variety of chronic diseases and functional impairments that may interfere with the maintenance of good nutritional status. Poor nutrition in the elderly is also a consequence of psychic and social problems. As life expectancy increases, maintaining good health and adequate nutritional status in the elderly is of paramount importance.

"A guide to healthy eating in old age" by Seema Puri and Kumud Khanna is an excellent book that adequately addresses the above issues and provides recommendations for nutrition for the elderly in a concise and comprehensive manner. The text is well written, organized and crystal clear. The good readability and the brief length of the book, together with the very useful tables, illustrations and nutritional recipes, make this book an excellent nutritional guide for elderly people in India. It is important to note that the list of recipes given in the final section of the book are traditional, simple, and easy to prepare, and are accompanied by a nutritional analysis of specific nutrients that are of importance in old age.

In addition, nutrition professionals involved with older adults, whether at a local, state, or federal level, will find this book a valuable reference. Others who should find this material helpful are hospital-based nutrition professionals and students in academic settings and the community.

Notes for Contributors

Frequency of publication

Twice a year. Papers for review will be accepted throughout the year to e-mail: editor@IFHEJournal.org.

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 (ECOSOC, FAO, UNESCO, UNICEF) and with the Council of Europe.

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.

Author's biography

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Editorial

Issue 2, 2010

Dear colleagues

Since I wrote the last editorial, many lives, many homes, many families, many communities have been impacted by natural disasters. It seems lately that there have been many more natural disasters and extreme weather events than usual. For example, recently: New Zealand’s city of Christchurch was devastated by an earthquake; Chile too suffered; the US experienced extreme blizzards; Brazil, Pakistan & South Africa flooding; and Bolivia, mudslides. Closer to home, my own state has suffered from flooding and cyclones, with 99% of the state declared a natural disaster area. We watched in fear as homes on the east coast of Australia were devastated by water, while on the west coast, bush fires were sweeping through the countryside and destroying hundreds of houses. The most recent of these natural disasters is the massive earthquake and resulting tsunami tragedy in Japan, reminding us through graphic images that we have little resistance to the huge forces of nature. There is no doubt the wellbeing of individuals and families is paramount at these times. As home economists I believe we have a special role during these difficult times. Our specialist knowledge can transform aid delivery and recovery, and assist in supporting those affected. Importantly, home economics recognises the importance of the basic needs of food, shelter and clothing; and empowers individuals and families to regain a sense of wellbeing. According to the IFHE Position Statement, Home Economics is a "field of study and a profession, situated in the human sciences that draws from a range of disciplines to achieve optimal and sustainable living for individuals, families and communities... The thread or essential ingredient that all subjects, courses of study and professionals identifying as home economists must exhibit has at least three essential dimensions:

- a focus on fundamental needs and practical concerns of individuals and family in everyday life and their importance both at the individual and near community levels, and also at societal and global levels so that wellbeing can be enhanced in an ever changing and ever challenging environment;
- the integration of knowledge, processes and practical skills from multiple disciplines synthesised through interdisciplinary and transdisciplinary inquiry and pertinent paradigms; AND
- demonstrated capacity to take critical/ transformative/ emancipatory action to enhance wellbeing and to advocate for individuals, families and communities at all levels and sectors of society.

There is no doubt there is an important role for Home Economists to regain the balance in our communities.

Donna Pendergast, PhD
Editor, IJHE

Non dietary exposure:
Family practice during use and storage of domestic pesticides

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Abstract

The purpose of this study was to investigate the family exposure during use and storage of pesticides in their home environment. A survey of 150 students' families was conducted among rural and urban regions in and around Alexandria. Data were analyzed in the SPSS software program. The results showed that 96.0% of housewives used insecticide products with various trade name and active ingredients for controlling insects at home. The housewives generally reported using at least 2 or 3 types. Around half of the sample's members (51.3%) stored insecticides in the kitchen, followed by bedroom (31.3%). The family member who usually applied or sprayed pesticides was the mother (71.3%). It was found that 35.3% understand the label. More than one third of the respondents depended on the salesman's information in marketing the effective product. Statistical analysis showed that there was significant correlation between using pesticides, non-changing of the clothes after spraying, and the presence of health adverse effect. Also, significant correlation was found between respondents' region and use of malathion. This study revealed that the likelihood of adverse health effects is related to the magnitude, frequency and duration of exposure. It is expected that families are exposed to 27ml of active ingredient per month during summer.

Key words: family practices; household insecticides; label; consumer protection; risk assessment; home management; non dietary exposure; daily activities

Introduction

The use and storage of pesticides in household and agriculture for crop protection and pest control has been associated with environmental contamination and human health problems worldwide (Khan, 1980; Van der Hoek,, Konradsen, Athukorala, & Wanigadewa, 1998; Soares, Almeida, & Moro, 2003).

Pesticides are used throughout the community. These chemicals can enter the body through eating, drinking, breathing and absorption through the skin. There has been increasing concern about children's non dietary exposure to pesticides and the potential health effects of such exposure. The literature often suggests that young children are particularly susceptible to exposure to pesticides, and importantly that the majority of children's exposure to pesticides occurs within the home environment (World Health Organization (WHO), 1997). Exposure to household chemicals is affected by the way people handle them in terms of storage, use, and precautions. Thus, it is important to describe these practices, as they define the behavioural components of exposure and allow meaningful exposure assessment (European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC), 1994). For example, Hakkinen (1993) demonstrated that the different ways of handling a granular detergent product led to different amounts of the product's dust being inhaled by the consumer. If products are used in high concentrations, or are mixed, diluted or used under poor ventilation conditions, a potential health hazard may ensue (Hughson & Aitken, 2004).

Millions of people are exposed to pesticides in the Eastern Mediterranean, an increasingly agricultural region. In Egypt, over 1 million children between the ages of 7 and 12 years help with cotton pest management, exposing them to pesticides. Pesticides were the leading cause of deaths from poisonings in children in Iran, according to a study conducted there (WHO, 2004a). The exposure of young children and agriculture workers to pesticides is the most relevant occupational hazard of pesticide use, primarily in developing countries (van der Hoek et al., 1998 Hurtig et al., 2003). Some scientists think that exposure to pesticides in the uterus may have negative effects on a foetus that may manifest in problems such as growth and behavioural disorders or reduced resistance to pesticide toxicity later in life (BBC, 2007). It is estimated that there are between one million and five million pesticide poisonings each year, resulting in 20 thousand deaths worldwide. The exact number of child poisonings from pesticides is unknown but is assumed to be large (WHO, 2004b). A large range of pesticide products with active pesticide ingredients are available for non agricultural use in the markets: these products include aerosol fly sprays, powders to kill cockroaches and ants, rodenticides, products to kill fleas, and liquids to treat head lice. Special mixed forms are locally and popularly used as insecticides in the region.

The production, trade, use, and release of many synthetic chemicals are now widely recognized as a global threat to human health and the environment. Yet, the world's chemical industries continue to produce and release thousands of chemical compounds every year, in most cases with no or very little testing and understanding of their impacts on people and the environment, the consumer level of knowledge about these synthetic chemicals is low in Alexandria (Abdelgalil, 2004).

There are currently no comprehensive studies of non agricultural pesticides being used in homes and gardens. There have been a number of studies of domestic pesticide use in the USA. In particular, there has been increasing concern about children's non-dietary exposure to pesticides and the potential health effects of such exposure. A number of epidemiological studies, mostly conducted in the USA, have associated the use of pesticides with a variety of alleged adverse effects in children, including cancer, and problems with the nervous system, immune system and reproductive system (Bonvallot & Dor, 2004; Zahm & Ward, 1998, Daniels, Olshan, & Savitz, (1997)). However, little evidence is available on the health effects of long-term, low-level chemical exposure of housewives such as through inhalation of non-volatile components when using spray chemical products (Mergler, 1999; Gauke et al., 2009).

In Egypt, according to a recent report, the percentage of children below 5 years who suffer from acute respiratory diseases is estimated to be 10.7% in urban regions, and 8.1% in rural regions (The Information and Decision Support Center (IDSC), 2005). Certain populations of children, for example, children of agricultural workers, are especially vulnerable to poisoning from pesticides. A foetus can be exposed in the uterus when their mothers use pesticides, work in a sprayed fields, or work near spraying operations. While breastfeeding is the best choice for infant nutrition, it is possible that mothers exposed to excessively high levels of pesticides can retain chemicals in their breast milk, thereby exposing their children (Yorghos Remvikos 2008).

Little is known about pesticides/ insecticides management and its use within the families. No information exists on the intensity and frequency of pesticides application, costs, market options or housewives' knowledge of pesticides application use, storage, precautions and pest biology. There are reports of undesirable effects of pesticides on humans that include acute and chronic health problems through contaminated soil and water. There are numerous pesticides active ingredients and each has a different impact on human health and the environment (Fernandez-Cornejo & Jans, 1995). As a result of the widespread dependence of pesticides and continued problems of pest attacks, a study of current practice in use and storage was carried out in and around Alexandria based on a previous study on the toxicity levels of several organophosphorus pesticides on the market (Kenawy & Abdelgalil, 2008). The author, who lived in a European country for a period of time, and currently is a lecturer of a curriculum titled home tasks management for under and post graduates students and another curriculum titled family health and the environment for under and post-graduate students at the department of home economics, Alexandria University, noticed the enormous amount of pesticides women use compared to their European counterparts.

The major objectives of this study are (i) to obtain comprehensive information on domestic pest control, patterns of pesticide products and the pesticides market, (ii) to investigate the number of pesticides products used and the family practices in using and storing domestic pesticides at urban and rural regions in and around Alexandria, and (iii) to estimate the quantity of active ingredients to which families are exposed in the home environment. This information is needed to evaluate the potential returns of different strategies to reduce the use of pesticides and to decrease chronic exposure and pesticide residues in our domestic environment. It is also essential for an analysis of appropriate points within the non-dietary exposure to monitor and control the flow of residues to consumers.

2. Materials and methods

The methods used in this study were adapted from the model developed by French anthropologist (Desjeux, 1998; Desjeux, Alami, & Moussaoui, 2009) to understand daily life, with a focus on use, practices, and unresolved problems to determine whether a product or service can fit into practices on a micro-social scale.

A questionnaire based on standardized questionnaires used in other studies (Abdelgalil, 2004) was prepared and tested on ten volunteer housewives. Suggestions from this group were included in the final standardized questionnaire, which included items related to housewives' practices in using and storing pesticides.

Participants in the study were 150 housewives who were living in urban and rural regions in an around Alexandria, and who were in charge of household chores; they were selected as they were the mothers and relatives of students. They were observed and questioned using the questionnaire between September and November 2008.

Interviews were carried out by well trained students in the home economics department at Alexandria University, to aid the researcher in the distribution and collection of the data. Observations of real work strategies were complemented by asking the women about the reasons for their observed choices of insecticides. The collected information helped to understand housewives' use and storage of domestic pesticides in different regions. Questions were ordered according to domestic tasks; the questionnaire Reliability Coefficients Alpha = .6247.

Housewives were asked about (i) personal information: age, education level, family size and number of children at home, work status, and the resident region (urban /rural region), (ii) pest control management at home: the types and number of insecticides used to control insect, the storage area at home, reading and understanding of pesticide labels and caution signs, and the role of marketing in choosing the domestic pesticides; (iii) practices and handling of pesticides: who applies or sprays the pesticide, the wearing of a mask and gloves during use, the changing of clothes and washing of hands after application, whether windows are closed or opened during application, and the regularity of application; and (iv) exposure and health effects; whether any family member attended a doctor in regards to symptoms related to the respiratory system, immune system, or nervous system. The amount of pesticides used in each activity was observed and measured in (i) cups if the products in powder form, and (ii) splashes if in liquid or spray form. The amount was later measured at the home management laboratory and converted into milligram or grams depending on the physical state of the product. Raw data from the questionnaires were coded then analysed using SPSS (Statistical Package for Social Science) version 10.0 (SPSS Inc). Data were mainly expressed descriptively as percentages or mean scores. Pearson correlation analysis was used. Statistical significance was set at $p<.05$ and p.01. (Albahei, 1978).

3. Results and discussion

3.1 Participants' profiles

Table (1) presents the demographic and occupational characteristics of the 150 housewives included in the analysis. Almost one third of the participants lived in the urban regions of Alexandria; the majority of respondents (70.7%) lived outside Alexandria in the rural regions of Albehaira Governorate. The age of the housewives ranged from 24 to 59 years (M = 38 years). In terms of education, 26.0% had moderate education or completed preparatory school, 43.3% had attained a diploma or completed three years of education after basic education, and 30.7% had attained a university degree or higher level of education. Regarding family size, 50.0% of the families had between 2 and 4 children, and (30.0%) of respondents had more than 4 children. Almost one third of respondents (30.7%) reported working in paid occupations, while 69.3% were not in paid employment.

3.2. Pest control management

The use, number, types, storage, and purchasing of pesticides, in addition to exposure to pesticides and the active ingredients of pesticides, were explored in this study.

Characteristics	Housewives' age				Education attainment			Family size			Work status		Resident region	
	20-29	30-39	40- 49	> 50	Moderate	Diploma	Univ'y degree	2-3	4-6	>6	Yes	No	Rural	Urban
N	26	67	51	6	39	65	46	30	75	45	46	104	106	44
%	17.3	44.7	34.0	4.0	26.0	43.3	30.7	20.0	50.0	30.0	30.7	69.3	70.7	29.3
Total	Mean = 38 STD = 8.354 N=150				N=150			Mean=5,173 STD=1.801 N=150			N=150		N=150	

Table 1: Social and demographic characteristics of the housewives in the study

3.2.1. The use of pesticides

The interviews showed that only 4.0% of respondents considered themselves not to be pesticides users; 96.0% of respondents reported the use of several types of pesticide / insecticide products at home. In terms of multiple product use, 26.0% and 40.7% of respondents reported using 2 or 3 types of insecticides at home, respectively, either within the proceeding four months; only 28.3% of respondents use 4 or more types of insecticides (see table 2).

Among the pesticides users, a significant correlation (2-tailed, at 0.01 level of significance) was found between the use of malathion and living in a rural region (.361**). In addition, a significant correlation (2-tailed, at 0.01 level of significance) was found between the frequency of pesticide use and the age of respondents, such that younger housewives used pesticides more frequently than did older housewives (.457**). Further, a significant correlation (2-tailed, at 0.01 level of significance) was found between the use of pesticides and the presence of health problems such as asthma or neurological symptoms, as diagnosed by a doctor (.380**).

Variables	Non users	Users							Total N=
Number of products used	0	1	2	3	4	5	6	Total	
Number of respondents	6	1	39	61	32	10	1	144	150
% of respondents	4.0	0.7	26.0	40.7	21.3	6.7	0.7	96.0	100

Table 2: Number and percentage of products used per family

3.2.2. Types and purpose of using pesticides

The types of pesticides used at home depended on the reason for use and consumer preferences. Regarding the form of pesticides, 87.3% and 88.7% of respondents used pesticides as spray and powder, respectively. Some respondents (26.7%) prepared a paste using boric acid to control insects. These respondents considered such a method as effective and safe as, and cheaper than, the pesticide products on the market (table 3).

	Types of products			Reason for use of pesticide products				
Types of product	Spray	Powder	Home-made paste	Head lice	Crawling insects	Flying insects	Ants	Rodents
Number of use	131	133	40	23	113	115	124	21
% of users	87.3	88.7	26.7	15.3	75.3	76.7	82.7	14.0

Table 3: Types and Purpose of using pesticides

3.2.3. Storage of pesticides / insecticides

The respondents reported that they store insecticides in many areas at home. Table (4) shows that 51.3% of respondents stored insecticides in the kitchen, either on the work surface (17.3%) or under the sink (34.0%), and 20.7% of respondents stored pesticides in the bathroom. Some respondents (14.7 %) considered the living room as storage area to avoid contamination of food and for tidiness, while 31.3% of respondents stored pesticides in the bedroom; some believed the bedroom to be the safest storage place in terms of restricting children's access to pesticides.

Storage area	Kitchen			Bathroom	Living room	Bedroom
	Kitchen	Work surface	Under the sink			
Number of users	77	26	51	31	22	47
% of users	51.3	17.3	34.0	20.7	14.7	31.3

n= 150

Table 4: Insecticides storage area

3.2.4. Shopping and purchasing practice

Reading and understanding label

Table 5 shows that 50.0% of respondents reported reading pesticide labels and believed that the labels' information was important; however, only 35.3% of respondents understood the label contents. Pesticide labels use the terms caution, warning, or danger; despite the low rate of understanding of the labels, almost all interviewees considered insecticides to be harmful or dangerous.

Some families (34.0%) depended on the product's marketing in deciding on the most effective and suitable product, and the method of application. Only 12.7% of the respondents specify a part of the family budget for purchasing domestic insecticides.

	Reading label	Reading precaution	Under-standing label	Depend on marketing information	Specify part of budget
Number of users	75	78	53	51	19
% of users	50.0	52.0	35.3	34.0	12.7

Table 5: Shopping and purchasing practices

3.3. Family practices in using pesticides

Exposure to a range of pollutants was examined by asking respondents about their practices regarding the application of pesticides. Such practices included protective measures such as wearing masks and gloves during application, washing hands and changing clothes after application, opening windows during application, and the regularity of application.

All respondents considered pesticides to be harmful, and all users reported washing their hands after use. A significant correlation (2-tailed, at 0.01 level of significance) was found between the existence of medical symptoms and changing clothes after pesticide use (.251**), and the presence of the children at home during spraying (.775**).

	Person using pesticide			Washing hands after application	Wear-ing mask	Wearing Gloves	Chang-ing clothes	Opening windows during spray-ing	Closing windows during spraying	Exist-ence of symp-toms
	Mother	Father	Other							
N	107	62	47	144	5	6	13	36	108	87
%	71. 3	41.3	31.3	96,0	3.3	4.0	8.7	24.0	72.0	58.0
Educ'n					0.372*					

Table 6: Family practices during pesticide use

3.4 Exposure to pesticides and health effect:

Chronic, low-level exposure to pesticide can affect the skin, eyes, nervous system, cardiovascular system, respiratory system, gastrointestinal tract, liver, kidneys, reproductive system and blood. Recent research has examined the effect that some pesticides may have on the endocrine (hormone) systems of children. Such endocrine-disrupting chemicals can inhibit normal hormones, which may affect the physical and neurological development of children and adolescents (WHO, 2004).

3.4.1 Regularity of application

More than half (57.3%) of respondents reported that they used insecticides regularly, and usually applied several types of insecticides during a month. Table 7 shows the percentage of participants using pesticides daily (30.0%), weekly (30.7%), and monthly (35.3%). Although it was difficult to arrive at precise estimates, it was generally recognized that a considerable number of people continue to be exposed to and affected by pesticides.

	Regularity of application			Spraying or application			
	Regular application	Not regular	Total	Daily	Weekly	Monthly	Total
Number of respondents	86	58	144	45	46	53	144
% of respondents	57.3	38.7	96.0	30.0	30.7	35.3	96.0

Table 7: Regularity of application or spraying

3.4.2. Active ingredient

Observation and the questionnaire revealed that different insecticides were used by respondents at home; some products have the same active ingredients but were marketed under different trade names. Table 8 presents the active ingredient listed on the containers' label. There is only one family of respondents reported using two kg malathion 5% per year for using in farm and house.

It was found that the capacity of the most commonly used pressurized containers is 300ml liquid or 250gm powder per container. The most commonly used active ingredients are organophosphate and pyrethroid, and some insecticides contained two or more kinds of active ingredients. Nearly half (46.7%) of the respondents used malathion 5% concentrate, which is used in rural zones as weed killer and as insecticide for controlling ants, while 44.7% of respondents used insecticides containing a mixture of active ingredients classified as organophosphate and pyrethroid, or a mixture of two types of pyrethroid, in addition to other chemical agents such as solvents, propellants, or deodorized kerosene.

3.4.3. Estimating the quantity of active ingredients to which families were exposed

Observation revealed that exposure of family members to insecticides happened in the home when insecticide powder was placed on work surfaces, or on the floor in the corners of the rooms or kitchen. Children at home may have been in contact with contaminated surfaces such as furniture or play equipment because of spraying insecticides daily, sometimes more than once a day with different amounts of splashes. The three most frequently used products were considered when trying to estimate the quantity of active ingredients to which families were exposed daily, weekly or monthly. A simple calculation method was used to determine the quantity of active ingredients used per month and per season (table 9).

Product	Active Ingredients (A.I.) Name	% of A. I. into the container	Action	Chemical class	% of users
1	Sumithion	3.0	Insecticide	Organophosphate	5.3
2	Deltamethrin 98% Sumithrin Butane Deodorized kerosene	0.02 0.5 45.0 53.88	Insecticide Chemical Chemical agent	Pyrethroid	39.7
3	Imiprothrin 50.5% Deltamethrin 98%	0.2 0.025	Insecticide	Pyrethroid	33.3
4	Tetramethrin Malathion	0.2 1.0	Insecticide Weed killer	Pyrethroid Organophosphate	44.7
5	D-allethrin 92% Tetramethrin95% P.B.O	0.136 0.368 0.500	Insecticide Insecticide	Pyrethroid Pyrethroid	32.7
6	Imiprothrin 50% Deltamethrin	0.20 0.02 55.0	Insecticide Insecticide Chemicals	Pyrethroid	39.3
7	Malathion	5.0	Insecticide Weed killer	Organophosphate	46.7
8	Pyrethroid	0.325 99.175	Insecticide Chemical agent	Pyrethroid	35.3

Table 8 Pesticides most used by the housewives, and the pesticides' active ingredients

Product	Active ingredient	% of Active ingredient	Active ingredient/ container	Daily exposure	Weekly exposure	Monthly exposure	Per Season (3 month)
1	Malathion 5%	5.0		12.5gm	12.5	50gm	150gm
2	Pyrethroid	0.3s25	0.975ml	0.975ml	6.825ml.	27.3ml.	81.9ml.
3	Tetramethrin Malathion	0.2 1.0	0.5 2.5	0.5 2.5	0.5gm 2.5gm	2gm 10gm	6gm 30gm

Table 9: Percentage of active ingredients to which families were exposed

The likelihood of adverse health effects is related to the magnitude, frequency and duration of exposure to these chemicals. Some participants reported using products containing a mixture of active ingredients, and reported using the entire container in each application. Thus, regular use may result in families being exposed to 81.9ml of pyrethroid during a 3-

month period, for example, during summer when products are used frequently to control flies.

The respondents in this study reported that they have never been previously diagnosed with pesticide poisoning or medically treated for any exposure to any pesticide.

3.4.4. Existence of symptoms

Table 6 shows that more than half (58.0%) of the respondents reported that at least one family member was diagnosed by a doctor as suffering from symptoms relating to the nervous system, or from asthma. Several researchers (Morgan, 1982; Meister, 1984; Haug & Hoffman, 1990; WHO, 2004) state that cold burning and numbness of the skin are experienced in people exposed to 5-12mg deltamethrin per cubic meter of air; in addition, headache, heartburn and skin spots were reported, and these symptoms were dependent on the time of the year.

Significant correlation between resident region, product use, and person applying product

	Resident region e	Ragon	Malathion	Insecticide powder	Rodenticides	The mother
Resident region	1.000	.223**	-.361**	.167*	.168*	.274**

** Correlation is significant at 0.01 level (2 tailed)

* Correlation is significant at 0.05 level (2 tailed)

Discussion

Estimates of the potential dermal intake of organophosphate and pyrethroid by children from contaminated surfaces suggested that risks of acute and chronic effects are not slight, since exposures may occur for moderately long periods at intervals of approximately several days before cleaning or removing the dust of powder insecticides (Lu & Fenske, 1999). Pyrethroid was the most common active ingredient in the insecticides used by the participants. Deltamethrin is a synthetic insecticide based structurally on natural pyrethrins, which rapidly paralyse the insect nervous system giving a quick knockdown effect (Haug & Hoffman, 1990). There is no degradation of deltamethrin in storage for 6 months at 40C°. It is extremely stable to atmospheric oxygen (Kidd & James, 1991). Recently, in South Africa, residues of deltamethrin were found in breast milk, together with DDT, in an area that used DDT treatment for malaria control, as well as pyrethroid in small-scale agriculture (Bouwman, Sereda, & Meinhardt, 2006).

The aerial application of malathion and pyrethroid and its derivatives, a widely used organophosphate and pyrethroid insecticides, has raised our concerns about potential adverse health effects.

Exposure to deltamethrin during its manufacture over 7-8 years resulted in transient cutaneous and mucous membrane irritation, which could be prevented by use of gloves and face masks. No other ill effects were seen (Hayes & Laws, 1990).

Farmers who used agricultural insecticides experienced increased neurological symptoms, even when they were no longer using the products. National Institute of Health reported that data from 18,782 North Carolina and Iowa farmers linked use of insecticides, including organophosphates and organochlorines, to reports of reoccurring headache, fatigue, insomnia dizziness, nausea, hand tremors, numbness and other neurological symptoms (NIH News 2005). Very young children explore, taste and touch objects and crawl on the ground, thereby they ingest and absorb pesticides if the areas and items they explore are contaminated. As children begin to walk, develop climbing skills and grasp objects, pesticides left within their reach pose a danger. Children who have a tendency to eat non-food items are at particular risk of ingestion of pesticides in contaminated items, such as soil or other objects that they tend to eat. A child's size and weight affect pesticide poisonings because, relative to their size, children eat, drink and breathe more than adults. The central nervous system undergoes its period of most rapid development from the foetal stage through the first six years of life, so young children are especially vulnerable to pesticides that act as neurotoxins. The dermal area of an infant per unit of body weight is greater than that of an adult, allowing for greater vulnerability to dermal absorption. Children's breathing zones are closer to the ground, exposing them to inhalation of pesticides that linger at floor level. The use of acutely toxic pesticides associated with a weak or absent legislative framework regulating pesticide use is one of the major reasons for the high incidence of poisoning in some developing countries.

Additional factors such as lack of information, low education levels in the rural region, poor and inadequate working conditions, inadequate protection during pesticide application, and inappropriate spraying technology have also been shown to play important roles in exposing families to hazards. In order to reduce the exposure of human to insecticides, it is necessary to reduce the level of active ingredients in products, and to raise awareness among families about how to handle pesticides and domestic insecticides during application and storing. This is because all family members in every home is exposed to insecticides, for instance when insecticides are applied to work surfaces, to the floor, and in the corners of rooms including the kitchen. Children are at risk of exposure through coming into contact with contaminated play equipment.

Recommendations

Programs of pesticide safety education and pesticide application regulation must be designed to protect the families from pesticide misuse. However, reducing the use of pesticides and choosing less toxic pesticides may reduce risks faced by society and the environment as a result of pesticide use.

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Biography

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References

Abdelgalil, Mona S. (2004). Knowledge and attitudes of Egyptian and French consumer towards the Genetically Modified Food (GMF) in the markets (A comparative study). Unpublished PhD thesis, Alexandria University, Egypt. Available from http://tel.archives-ouvertes.fr/tel-00418569/fr/

Al-Fikr AlArabi. (1978). Statistical psychology, Arab Thought foundation. BBC. (2007). Pesticides. Retrieved September 15, 2007, from http://www.arabthought.org/index.php?lang=en.

Albahei F.(1978) *Statistical psychology*, Arab Thought foundation for press and publishing

BBC News. (2007), *Pesticides*. Retrieved on September 15, 2007.

Bonvallot, N., & Dor, F. (2004). Insecticides organochlorés aux Antilles: identification des dangers et valeurs toxicologiques de référence (VTR). Institut de Veille Sanitaire, Saint-Maurice, France.

Bouwman H., Sereda, B., & Meinhardt, H. M. (2006). Simultaneous presence of DDT pyrethroid residues in human breast milk from a malaria endemic area in South Africa. *Environmental Pollution, 144*(3), 902– 917.

Daniels, J. L., Olshan, A. F., & Savitz, D. A. (1997). Pesticides and childhood cancer. *Environmental Health Perspectives, 105*, 1068-1077.

Desjeux, D. (1998). *Les échelles d'observation de la consommation,* Argonautes. C&S, 1998, 37-56.

Desjeux, D., Alami, S., & Garabuau-Moussaoui, I. (2009). *Les méthodes qualitatives*, Que sais-je ? Presses Universitaire de France

European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC). (1994). *Assessment of non-occupational exposure to chemicals*. Technical Report No. 58. Brussels, Belgium: Author.

Fernandez-Cornejo, J. & Jan, Ss. (1995). Quality adjusted price and quantity indices for pesticides. *American Journal of Agricultural Economics* 77 (3)(1995): 645-59.

Hakkinen, P. J. (1993) Cleaning and laundry products, human exposure assessments, *Handbook of Hazardous Materials*

Haug, G. & Hoffman, H. (Eds.). (1990). *Chemistry of plant protection: Vol. 4. Synthetic pyrethroid insecticides: Structures and properties*. Berlin: Springer-Verlag.

Hayes, W. J., & Laws, E. R. (Ed.). (1990). Handbook of pesticide toxicology: Vol 2. Classes of pesticides. New York: Academic Press, Inc.

Hurtig, A. K., San Sebastian, M., Soto, A., Shingre, A., Zambrano, D. et al. (2003). Pesticide use among farmers in the Amazon basin of Ecuador. *Archives of Environmental Health, 58 (4)*, 223–228.

Hughson, G. W., & Aitken, R. J. (2004). Determination of dermal exposures during mixing, spraying and wiping activities. *Annals of Occupational Hygiene. 48*(3), 245–255. Retrieved September 15, 2007, from http://annhyg.oxfordjournals.org/content/48/3/245.full

Information, Decision Support Center (IDSC). (2005). *Population health survey*. Ministry of Health and Population. Information service unit. Retrieved September 15, 2007, from http://www.idsc.gov.eg/Services/search_inquiry.aspx.

Gauke V, Webb, C., Sanderson, H., Belanger, S. E., Fisk, P., Nielsen, A., Kasai, Y., Willing, A. Dyer, S.D., Stanton, K., & Sedlak, R.(2009). Human health risk assessment of long chain alcohols. *Ecotoxicology and Environmental Safety, 72*(4), 1016-1030.

Kenawy, A., & Abdelgalil, M. S. (2008) Comparative toxicity study between some organophosphorus and abamectin insecticides using earthworm (Lumbricus terrestirs) as a biomarker. *Alexandria Science Exchange Journal, 30*(3).

Khan, S. U. (1980). Pesticides in the soil environment. Amsterdam: Elsevier Scientific.

Kidd, H., & James, D. R. (Eds.). (1991). The agrochemicals handbook (3rd ed.). Cambridge UK: Royal Society of Chemistry Information Services. 2-13

Lu, C., & Fenske, R. A. (1999). Dermal transfer of chlorpyrifos residues from residential surfaces: Comparison of hand press, hand drag, wipe, and polyurethane foam roller measurements after broadcast and aerosol pesticide applications. *Environmental Health Perspectives, 107*(6), 463–467.

Meister, R. T. (1984). Farm chemicals handbook (70th ed.). G. L.Berg,C. Sine, S. Meister, and J. Poplyk, eds. Willoughby, OH: Meister Publishing Co.

Mergler, D. (1999). Combining quantitative and qualitative approaches in occupational health for a better understanding of the impact of work related disorders. *Scandinavian Journal Work Environmental Health, 52*, 54–60.

Morgan, D. P. (1982). *Recognition and management of pesticide poisonings* (3rd ed.). Washington, DC: U.S. Environmental Protection Agency.

National Institute of Health News. (2005). Use of insecticides linked to lasting neurological problems for farmers. Retrieved September 15, 2007, from http://www.nih.gov/news/pr/apr2005/niehs-2

Soares, W., Almeida, R.M.V.R., & Moro, S. (2003). Rural work and risk factors associated with pesticide use in Minas Gerais, Brazil. *Cadernos de Saúde Pública 19*, 1117–1127.

Van der Hoek, W., Konradsen, F., Athukorala, K., & Wanigadewa, T. (1998). Pesticide poisoning: A major health problem in Sri Lanka. *Social Science and Medicine., 46*, 495–504.

World Health Organization. (1997). WHO, *Assessment of exposure to indoor air pollutants*. WHO regional publications, European series, no 78.

World Health Organization. (2004a). *Issue brief series: Pesticides - Healthy environments for children alliance*. Retrieved September 15, 2007, from www.who.int/heca/

World Health Organization. (2004b). *The impact of pesticides on health: Preventing intentional and unintentional deaths from pesticide poisoning*. Retrieved September 15, 2007, from http://www.who.int/mentalhealth/prevention/suicide/en/PesticidesHealth2.pdf.

Yorghos Remvikos. (2008). Substances chimiques: Expositions et usages, conséquences sanitaires et environnementales. Lectures of diploma health and environnement (diplôme santé et environnement), Personal contact, UVSQ Versailles University – France.

Zahm, S. H., & Ward, M. H. (1998). Pesticides and childhood cancer. *Environmental Health Perspective, 106* (supplement), 111-116.

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De-fogging the philosophical, professional mirror: Insights from a light-hearted Metaphor

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Abstract

This paper employs the metaphor of a foggy mirror to gain fresh insights into how the profession of home economics can ensure philosophical well-being. After describing the science of foggy mirrors, the discussion turns to three options available to the profession to augment professional self-esteem, philosophical alignment and integrity: (1) custom-design a non-fogging professional mirror, ensured by a global dialogue and consensus on a core professional philosophy and set of competencies; (2) treat our current professional mirror to reduce how often it fogs up, appreciating that temporary professional insights and clarity are preferable but not sufficient; and (3) periodically swipe a permanently fogged mirror creating undesirable, permanent professional smears, with nominal clarity and vision. We argue that the best strategy is the first and we make a case for the necessity of an agreed-to philosophy of practice. Our hope is that, eventually, each person looking in the mirror will embody the agreed-to philosophical core of the profession.

Keywords: home economics, human ecology, family and consumer sciences, philosophical well-being, professional self-esteem, integrity, professional image

Around the world, members of the profession (home economics, human ecology, family and consumer sciences (FCS), and human sciences) are celebrating the beginning of a new century of influence and professional growth. As anticipated, our 100th birthday celebration has led to “an intensive re-examination of where it has been and where it is going” (Goldsmith, 1993, p. 48). To illustrate, the theme for the 2010 101st American conference was a New Century for FCS: *New Challenges, New Solutions*. The theme for the 2010 International Federation for Home Economics (IFHE) Council in Ireland was *Vision 2020: Home Economics, Changing Perspectives in a Changing Environment.*

As the profession moves through the 21st century, it is experiencing a convergence, a blending of the old with the new, deeply influenced by how we see ourselves, what we do and how others see us (McGregor, 2007a; Pendergast, 2009). Homes and families are the core social institution of all cultures. They are being re-defined as they struggle to change in orderto cope with changes in other social institutions (e.g., economies, labour markets, governments, faith institutions) (McGregor, 2009a). For the sake of responsibly fulfilling multidimensional individual and family well-being (McGregor & Goldsmith, 1998), it is paramount that home economists own what they do and stand behind it (Goldsmith, 1993, 2009). However, this aspect of our professional practice currently is compromised because of ebbing philosophical well-being and lack of alignment between personal and professional philosophy. The profession needs fresh insights into philosophical well-being because it affects our professional self-esteem (McGregor, 2006).

Regarding professional self-esteem, what do we see when we look in the proverbial mirror? How do we feel about that image? How philosophically-well are we, as professionals and as a profession? The purpose of this paper is to begin to explore these questions by employing a light-hearted (playful) metaphor of a foggy mirror. We assert that by using this metaphor, we can learn about ourselves, personally and as a profession.

To that end, the next section shares an overview of the science of foggy mirrors, followed with an application of this metaphor to help strategize about how to enhance philosophical well-being, professional self-esteem and philosophical alignment. We believe that the distorted reflection in a foggy mirror (or the reflection from a clear mirror) affects what we conclude about ourselves and our professional future. We examine what can be done to create a new mirror or de-fog a regular mirror so we are not continually staring at self-induced and externally generated professional smears, created as we swipe at the surface to temporarily remove the fog to gain vision and clarity. Our hope is that, eventually, each person looking in the mirror will embody the agreed-to philosophical core of the profession.

The science of fog and mirrors

As a caveat, we recognize that the word "science" is complicated and often taken to mean natural science. As we employ this metaphor, we opt to first explain the natural, empirical science of a foggy mirror, anticipating that readers are familiar with the assumption that all sciences—natural, human and social—are germane to home economics practice. We believe this metaphor is a useful tool for crossing the borders of the academy, professional practices (generalized and specialized), business, and everyday life. By stretching our points of view (stretching our horizons), we can better relate to others, thereby enabling us to see the whole picture—a philosophically-well profession.

Furthermore, we assume that professional, philosophical clarity is a combination of the nature of the person and the nature of the mirror. Regarding the latter, the coating on the mirror represents our level of agreement about a philosophical core. Any reflection of the viewer bounces back off of this coating, in addition to reflecting the viewer's inner philosophical essence (the nature of the person). All home economists have some degree of philosophical well-being and some degree of alignment with the existing philosophical core (Vaines, 1990). A mirror forms an image by reflecting light. This metaphor suggests that the mirror reflects back the inner light (the philosophical wellness) of each home economist and does so by bouncing the image off of its existing philosophical coating (whether agreed-to or not). If the mirror is clear, it reflects back whatever is inside the person and does so from the level of current philosophical agreement of the profession. From an unfogged surface, the viewer gains clarity about inner and outer philosophical alignment. At least with a clear reflection, people can make choices. To that end, the paper is about the significance of having an agreed-to philosophical core and about how to achieve alignment between personal and professional philosophies of what it means to be a home economist.

Everyone is familiar with glass mirrors used in bathrooms and with the fog that can build up with too much moisture and condensation. Let us look at the science of foggy mirrors. A mirror is any object that is smooth enough to form an image. Glass is mostly sand. Glass becomes a mirror when, through a detailed process, a reflective substance (usually silver or aluminium) is applied to the back. Sometimes a protective overcoat is applied to the glass to prevent oxidation of the reflective coating (to mitigate cloudiness).

The creation of fog on a mirror results from a physical reaction between water vapour (water in its gaseous state) and temperature of the air. The hot temperature of the water in the bath or shower reacts to the cooler temperature of the air in the bathroom, forming evaporation. This process causes people to see the *foggy steam*. The *steam* then sticks to the mirror. The resultant *fog* is a layer of moisture; that is, the water vapour is made visible. Fog is actually millions of little beads of water that collect on the surface of the mirror creating a sheet of water that scatters light, producing the distorted image in the reflection.

Fog obscures what is on the surface of the mirror or glass. It dims the image, clouds reality and conceals the truth. Clarity is blurred, leading to uncertainty, confusion and vagueness. With such reduced visibility, it is hard to really see what is staring back at people from the mirror. Actually, everything in the room is 'foggy' as well, but only the mirror 'shows it.' Touch the walls and ceiling and they are wet, too. Everything is wet because of surface tension. Water adheres strongly to itself and weakly to the mirror's surface; hence, the water clusters into drops. Because of the reduced tension between the surface of one water molecule to another, the tiny beads of water stick together on surfaces rather than spreading out. When enough droplets come together to form a dense surface (con*dense*), fog is created, blocking one's ability to see the real surface. The fog is real, but it creates the feeling of an illusion. Reality is still there, just not clearly visible. It is obscured because the heavy mist reduces visibility (see Figure 1 used with permission, Wright, 2005).

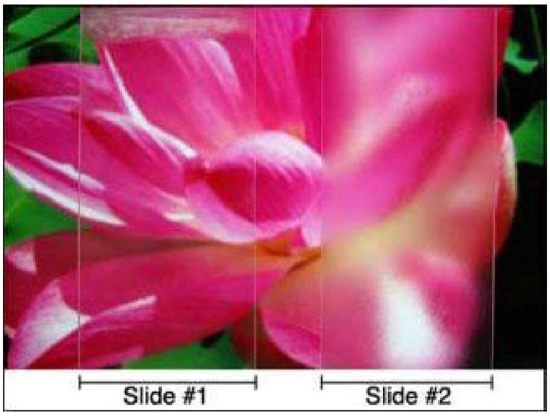

Figure 1

Mirrors that do not fog up have been designed. These mirrors are coated with a product that reduces the surface tension between the water droplets and the glass. There are also systems that heat mirrors from the back, thus reducing their tendency to fog up. Finally, people have found creative ways to temporarily remove the fog build up on regular mirrors, including swiping the mirror with their hands or a special cloth, using a bathroom fan, or leaving the bathroom window open while showering.

Learning from the foggy mirror metaphor

Using this light-hearted metaphor (a combination of technical how-to and scientific know-how), we now explore what we can learn about practitioners' opinions of themselves when they gaze into their professional mirror. Basically, the metaphor tells us that we can (a) design our own mirror so that it *never* fogs up, (b) work tirelessly to mitigate unavoidable fogging of a regular mirror that has received a temporary treatment, or (c) let the mirror stay fogged up, swiping it clean when we need clarity. What would each of these strategies look like, and which is preferred to ensure philosophical well-being?

Custom-designed non-fogging professional mirror

Professional integrity means one has to deeply respect the person who stares back from the mirror (McGregor & Gentzler, 2009). Imagine waking each morning of one's professional life and looking into a professional mirror that reflects back a healthy image of professional self-esteem and philosophical well-being. There is never any fog *because* there is philosophical well-being and alignment. Philosophical well-being is defined as always considering how one's practice might need to change to reflect the insights gained from constantly improving one's wisdom through deep, thorough and mature understandings of life. A philosophically-well home economist will have become a philosopher, a person who seeks reason and truth by thinking, meditating, deliberating about and celebrating life (McGregor, 2004, 2006).

An improved attitude or philosophical well-being *can* happen if we socialize (or re-socialize) members of the profession to a common philosophical core, one that holds regardless of areas of specialization or subfields that have emerged over the past 100 years (see McGregor, 2009c, 2010c; McGregor & MacCleave, 2007). We have to custom-design our own non-fogging professional mirror. This process entails respecting the tension between the profession's philosophical core and each practitioners' personal professional core, such that when they come into contact, they sheet off each other leaving a clear surface, indicative of philosophical alignment (e.g., Vaines, 1990). Through global dialogue, we can create this non-fogging mirror, akin to the breath of cool, fresh air that draws moisture away from the mirror, bringing clarity and focus to practice (McGregor, 2010c).

Mitigate unavoidable fogging

If, as a profession, we do not design our own professional mirror, and instead engage in remedial strategies to slow down the eventual fogging of a regular mirror, we end up creating a fall back plan. Most of the time, we are comfortable with what stares back at us in the mirror. We are relatively secure in our awareness and acceptance of a philosophical core for the profession and its imperfect alignment with our personal philosophies, including how we see ourselves as home economists and how others see us. This temporary comfort is possible because we took steps to slow down philosophical angst knowing that it would eventually materialize (the mirror *will* fog up). We would anticipate that when things get rough, our vision would be impaired by the clouding of the mirror (philosophical misalignment). There would be anticipated, periodic philosophical roadblocks that would warrant our attention. We would not be able to regain clarity unless we undertook another treatment of the mirror (philosophical reflections), knowing that this too is temporary. Nonetheless, this temporary treatment is better than the remaining option, which is living with a perpetually fogged professional mirror that can only be temporarily cleared with technical, quick-fix treatments—often too little, too late, if at all.

Periodically swipe a perpetually fogged mirror

With a perpetually fogged professional mirror, unless the professional home economist swipes the mirror, she cannot see her image in the mirror. All that reflects back is a blurred, obscured, hazy professional image. This repeated lack of clarity can lead to low professional self-esteem and unsatisfactory, misaligned philosophical well-being. Simply swiping the mirror with one's hand or cloth will smear the mirror and this smear will reappear the next time the mirror fogs up. It is not philosophically healthy to keep staring at a professional smear. Even if someone were to write something positive on a foggy mirror (e.g., "*I am proud to be a home economist*"), that message will only appear when the mirror fogs up again; otherwise, it cannot be discerned. There is no constant reinforcement of this professional validation. Also, the message disappears very quickly, meaning the professional and philosophical reinforcement is not lasting.

In truth, *any* message written on a mirror will continue to reappear until the mirror is cleaned or a new coating is applied to the back. So, if the image or message that emerges when the mirror fogs up is "*I am not sure about being a home economist*", this message never goes away and provides little professional solace. The result is that home economists avoid looking in the professional mirror and run the risk of becoming (remaining) philosophically unwell. In a series of short-term, quick fixes, they end up having to continually clean the surface of the mirror, always struggling with the nature of the messages that emerge when the mirror eventually fogs up again. This temporary fix to philosophical misalignment and low self-esteem is very labour and psychologically intensive.

Controlling the fog (philosophical alignment)

The authors asked themselves, "Do we fog up the mirror ourselves or does it get fogged up by external factors?" We concluded that the answer may be a bit of both. Regarding the former, if there is no intentional, coordinated effort to ensure world-wide global agreement of a professional philosophical core, *we* are to blame for fogging our mirror, for perpetuating professional angst and personal dissatisfaction with being a home economist. We *can* control *this* situation by building a custom-designed mirror that never fogs up, using a specially designed back coating (see below); that is, agree to a common philosophical core and advocate for personal and professional philosophical alignment.

Sometimes, the mirror becomes foggy because of external factors, such as the state of the economy. Who can deny the impact of the recent global recession on educational budget cuts? Smith and de Zwart (2010, p.26) observe that "[i]n the past twenty-five years, home economics has been buffeted by policy changes at the post-secondary and governmental levels, which has [sic] shaken any preconceived notions about the permanency of its status as a school subject."

The authors maintain that the main external factor that fogs our mirror is the public's misunderstood, misconstrued understandings of home economics and what it is about, informed by prevailing world views. In such instances, we have to accept that we cannot directly control another person's ideology or world view. We *can* understand that, usually, people hold (mis)conceptions of home economics due to past encounters with professionals in the field, and with more deeply entrenched, powerful ideological stances of what is important and valued in the world. Prevailing world views do not value families or the home except when they fulfil the roles of consumers, producers, and employees or labourers. If our raison d'être is families and homes, it stands to reason that we will not be valued as a profession by others who embrace these prevailing world views. We have to take a stand and push back against these mindsets (Goldsmith, 2009; McGregor, 2007a; McGregor, Pendergast, Seniuk, Eghan & Engberg, 2008; Pendergast & McGregor, 2007).

We can no longer downplay our century-long focus on home and family. The profession's contribution to the world is too unique and too significant to be marginalized and ignored (McGregor, 2007b, 2010a; Pendergast & McGregor, 2007). Smith and de Zwart (2010) suggest as solutions more lobbying to maintain and promote existing home economics related degrees and the development of certification programs, more mentoring of teachers and professionals already out there, more dialogue, and above all promoting the value of the field. Although we appreciate and support these efforts, we take a different stance in this paper, arguing that we need to build each of philosophical well-being, personal and professional alignment, and professional self-esteem that are not readily compromised. Only then can we feel confident that we are assuming a solid philosophical stance as we collectively approach the solution of practical perennial problems faced by individuals and families around the world.

In particular, we need to open another space for home economics where we can engage in behaviour that challenges the ideological status quo (Pendergast & McGregor, 2007; McGregor 2009b). In the process of creating our own custom-designed, crystal-clear professional mirror, and in striving for personal and professional philosophical alignment, we have to re-conceive and use power in ways that are consistent with the needs of humanity, not the market or global economies. When we finally free ourselves of the weight of a smaller vision of ourselves (the image reflecting back from that cloudy mirror), we will enable each other to move closer to each other and connect professionally and with humanity (reduce the surface tension). It is time to come out from under the shadows and the distortions that may come from a flawed mirror (i.e., an ill-thought out philosophical core and/or misalignment of personal and professional philosophies).

Conclusions

From its beginnings, the profession has been focused on the human condition, lived out on a daily basis in families and homes (Brown & Paolucci, 1978; McGregor, 2010b). The profession has a rich history of addressing human needs in the home, community and work force

(Goldsmith, 2010b). It is an honourable calling. The good of humanity depends on families and homes and, by association, on home economists (East, 1979). But, we need to be philosophically-well and in alignment in order to meet this challenge.

Members of the profession need to free themselves from their old views and align themselves with new ideas (i.e., a new, custom-designed philosophical core). As more and more of us become philosophically well, we can become professionally assertive, grounded in a solid, agreed-to philosophy of practice and personal and professional alignment. Philosophy means friendship (*philo*) and wisdom (*sophia*) (McGregor, 2004, 2007b). With more philosophically inspired leadership, we would better ensure a highly sustainable discipline and profession (Goldsmith, 2010a), and a stronger family base for humanity. We would continue to emphasize more informed judgments and effective decisions (DeVaney, 2010), grounded in an agreed-to philosophical core.

Ellen Swallow Richards stood for education, for advancement, for fairness, and for a belief in human goodness and progress. To follow in her laudable footsteps, we need to own what we do and to stand behind it. We need to re-claim our place at the table from a position of collective philosophical alignment and power (Goldsmith, 2009; Pendergast & McGregor, 2007). If we all embraced this line of thinking, we would not hesitate to look in the mirror anymore; rather, we would design a philosophically sound mirror (core) and then relish and welcome the clear, certain reflection of ourselves (philosophical alignment), and of this outstanding profession.

Biography

Sue L.T. McGregor is a Canadian home economist at Mount Saint Vincent University. Her intellectual work pushes the boundaries of consumer studies/home economics philosophy and leadership from integral, transdisciplinary and moral imperatives. A member of the IFHE's Research Committee, she also chairs IFHE's Leadership and Philosophy Committee. She is a Kappa Omicron Nu Research Fellow. Affiliated with 20 professional journals, she is Associate Editor of three home economics journals. Sue has delivered 35 keynotes/invited talks in 10 countries and published over 120 peer-reviewed publications, 11 book chapters, five monographs. She published 'Transformative Practice.' 'Consumer Moral Leadership' was published in 2010.

Elizabeth B. Goldsmith, Ph.D., is a Fulbright Scholar and former White House policy advisor on women's and girls' economic education under the Clinton administration. She is professor of Family Financial Analysis in the College of Human Sciences at Florida State University and serves as a mentor for the U.S. Dept. of Labor's Wi$eUp program for women ages 22-35. She has published 50 journal articles and given 18 international presentations from Brazil to Japan. She is the author of several college textbooks including Consumer Economics: Issues and Behavior, 2nd edition and Resource Management for Individuals and Families, 4th edition, both with Pearson.

Dr. Goldsmith is Co-Principal Investigator of a $341,511 grant entitled "The Development of Superior Personal Investing Performance" from the Financial Industry Regulatory Investor Education Foundation. The objective of the study is to identify differences in financial and

investing practices of householders nearing retirement who differ markedly in terms of current household wealth but had similar opportunities to build household wealth during their lifetime.

References

Brown, M., & Paolucci, B. (1979). *Home economics: A definition*. Alexandria, VA: American Association of Family and Consumer Sciences.

DeVaney, S. (2010). Editorial note. Special issue on financial literacy. *Family and Consumer Sciences Research Journal*, *38* (4), 359.

East, M. (1979). Comments on the paper, 'Home Economics: A Definition'. In M. Brown and B. Paolucci, *Home economics: A definition* [mimeographed] (pp.136-142). Alexandria, VA: American Association of Family and Consumer Sciences.

Goldsmith, E. (1993). Home economics: The discovered discipline. *Journal of Home Economics, 85*(4), 45-48.

Goldsmith, E. (2009). Reinventing home economics: Past, present, and implications for educators and 21st century families. *Keynote Address at the Brazilian Home Economics Annual Meeting*. Fortaleza, Brazil.

Goldsmith, E. (2010a). An exploration of sustainability, consumer behavior and social influence. *Paper presented at the International Federation of Home Economics Council Meeting*. Sligo, Ireland.

Goldsmith, E. (2010b). *Resource management for individuals and families* (4th ed.). Upper Saddle River, NJ: Pearson.

McGregor, S. L. T. (2004). Philosophical well-being. *Kappa Omicron Nu Human Sciences Working Paper Series*. Retrieved July 1, 2010 from http://www.kon.org/hswp/archive/philosophical.html

McGregor, S. L. T. (2006). *Transformative practice*. East Lansing, MI: Kappa Omicron Nu.

McGregor, S. L. T. (2007a). Intellectual showcasing. *Nurture: Research Journal for Human Civilization, 1*(1), 2-7. Retrieved July 1, 2010 from http://chek.edu.pk/NURTURE2007.pdf

McGregor, S. L. T. (2007b, April). Practice on purpose. *Keynote delivered at the Alberta Human Ecology/Home Economics Association conference*. Red Deer, AB. Retrieved July 1, 2010 from http://www.consultmcgregor.com/documents/keynotes/Alberta_2007_Practice_on_Purpose_PD_Overheads.pdf

McGregor, S. L. T. (2009a). Becoming family literate. *Journal of Family and Consumer Sciences, 101*(1), 60-66.

McGregor, S. L. T. (2009b). Contemporary families and new professional directions. *Panel presentation at the New York Family and Consumer Sciences AAFCS Affiliate's 100th Commemorative Conference*. Lake Placid, NY.

McGregor, S. L. T. (2009c). International conceptualizations of a 21st century vision of the profession. *Kappa Omicron Nu FORUM*, *18*(1). Retrieved July 1, 2010 from http://www.kon.org/archives/forum/18-1/mcgregor.html

McGregor, S. L. T. (2010b). Locating the human condition concept within home economics. *McGregor Monograph Series No. 201002*. Seabright, NS: McGregor Consulting Group. Retrieved July 1, 2010 from http://www.consultmcgregor.com/documents/publications/human-condition-monograph-2010.pdf

McGregor, S. L. T. (2010a). Home economics as an integrated, holistic system: Revisiting Bubolz and Sontag's 1988 human ecology approach. *International Journal of Consumer Studies, 35*(1), 26-34

McGregor, S. L. T. (2010c). Name changes and future-proofing the profession: Human sciences as a name? *International Journal of Home Economics*, *3*(1) 20-27.

McGregor, S. L. T., & Gentzler, Y. (2009). Preserving integrity: University program changes. *International Journal of Home Economics, 2*(1), 15-29.

McGregor, S. L. T., & Goldsmith, E. (1998). Expanding our understanding of quality of life, standard of living and well-being. *Journal of Family and Consumer Sciences, 90* (2), 2-6, 22.

McGregor, S. L. T., & MacCleave, A. (2007). Analysis to determine Canadian, American, and Australian agreement about home economics/family and consumer sciences professional competency domains. *Kappa Omicron Nu FORUM, 17(2),* http://www.kon.org/archives/forum/17-2/home_economics_professional_competency_domains.html

McGregor, S. L. T., Pendergast, D., Seniuk, E., Eghan, F., & Engberg, L. (2008). Choosing our future: Ideologies matter in the home economics profession. *International Journal of Home Economics, 1*(1), 48-68.

Pendergast, D. (2009). Generational theory and home economics. Future proofing the profession. *Family and Consumer Sciences Research Journal, 37*(3), 505-522.

Pendergast, D., & McGregor, S. L. T. (2007). *Positioning the profession beyond patriarchy* [Monograph]. East Lansing, MI: Kappa Omicron Nu. Retrieved July 1, 2010 from http://www.kon.org/patriarchy_monograph.pdf

Smith, G., & de Zwart, M. (2010). *Home economics: A contextual study of the subject and home economics teacher education*. Vancouver, BC: British Columbia Teachers' Federation PQT/Teacher Inquiry Project.

Vaines, E. (1990). Philosophical orientations and home economics. *Canadian Home Economics Journal, 40*(1), 6-11.

Wright, S. (2005). Researchers see clear end to fog. *MIT Tech Talk, 50*(1), 4.

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Maternal and child health education: a panacea to maternal mortality

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Abstract

This paper focuses on maternal and child health education as a panacea to maternal and child mortality and morbidity in Africa and in Nigeria in particular. Maternal and child mortality and morbidity were reviewed, with its effects on families and communities. Recommendations were made for reducing the maternal and infant mortality rates.

Keywords: Maternal mortality, morbidity, mortality, education.

Introduction

Provision of Maternal and Child Health (MCH) involves the meeting of health needs of women and their children. It focuses on good nutrition, clean environment, personal hygiene, adequate health facilities, good shelter, immunization against diseases, and good drinking water (Federal Ministry of Health (FMOH), 2000). MCH education demands that women should be trained in MCH practices which would enhance their health and that of their children. The health of the woman before and during pregnancy is a potential force that determines the health of the fetus (Imogie, 2000). Epidemiological studies all over the world have shown very strong correlations between the health of pregnant women and the outcome of pregnancies. Healthy pregnant women tend to have healthy babies. Very ill or malnourished women on the other hand are more likely to have problems during pregnancy and delivery and consequently the fetal well-being is affected (Ellis & Castello, 2002).

In order to achieve positive health outcomes the children should be protected against diseases such as tuberculosis, poliomyelitis, whooping cough, diphtheria, tetanus, malaria fever, measles, yellow fever and cerebrospinal meningitis through immunization, which should be timely and maintained. In addition, adequate breastfeeding, good nutrition, and protection against environmental conditions are essential in order to reduce infant death and morbidity. It is reasonable to assume that mothers can acquire appropriate knowledge and skills for meeting the needs of their children through MCH education. MCH education can be acquired through antenatal and postnatal clinics, family planning clinics, agricultural extension services, and community health services (Ingalls & Salerno, 1991).

In order to accomplish the goal of reducing levels of maternal and child mortality and morbidity in Sub-Saharan Africa (SSA), the Safe Motherhood Initiative (SMI) was launched by World Health Organization (WHO) globally in 1987; and the Society of Gynecology and Obstetrics of Nigeria (SOGON) launched the SMI in Nigeria in 1990. The initiative was implemented because it was determined that the dangers women face during pregnancy and childbirth are closely connected with their ignorance, lack of education and poverty. Some United Nations (UN) organizations such as the United Nations Children Emergency Fund (UNICEF) and the United Nations Agency for International Development Services (UNAIDS) are also committed to reducing levels of maternal and child mortality and morbidity in SSA (Berer & Ravindran, 1999).

Maternal and child health education is vital for the reduction of maternal and child mortality and morbidity. It is expected to be a regular feature of antenatal and postnatal clinics in Nigeria. However, at the dawn of the 21st century, maternal mortality is still unacceptably high in Nigeria (FMOH, 2000). For every 100,000 live births in Nigeria, about 1500 women die in the process of bringing these babies into the world (FMOH, 2000). This means that out of about 27 million women of reproductive age, 2 million will not survive either pregnancy or childbirth (FMOH, 2000). When this situation is compared with Europe and North America, which have maternal mortality rates (MMR) of 28 and 11 deaths respectively for every 100,000 live births (WHO, UNICEF, United Nations Fund for Population Activities (UNFPA), 2001), one would see that Nigeria's maternal mortality figures rank very high. It has also been noted that the increase in infant mortality rate from 87 per 1,000 births in 1989 to 114 per 1,000 births in 1996 reflected, among other things, the health and health education status of the mothers (FMOH, 2000).

Most of the obstetric causes of death are preventable and result from poverty, ignorance, poor hygiene, and lack of education and information on the part of mothers (FMOH, 2000). This situation applies to all states in Nigeria. Okereke, Kanu, Nwachukwu, Anyanwu, Ehiri, and Merrick (2005) also noted that in Nigeria, infants and maternal health prospects is a controversial issue, because of the laissez-faires attitude of government and the general populace. This problem stems from such factors as ignorance, apathy, poverty, lack of commitment, illiteracy and corruption. Yet, at this time there are few or no functional and well organized programs of MCH education administered at the antenatal and postnatal clinics in Nigeria.

Chamberlain (1997) reported a survey conducted on the health education given to expectant mothers and fathers. The aims were to prepare the couples for childbirth and childrearing. Formal antenatal and postnatal education classes addressed signs and symptoms of pregnancy, complications of pregnancy and delivery, stages in labor, personal hygiene, immunization, child health, family planning methods, and sexually transmitted diseases including HIV/AIDS, and included many excellent videos. Many good books about pregnancy and childbirth were also made available. Evaluation activities included asking women questions about what they learnt at each antenatal visit; conducting demographic studies on MMR and IMR; and the multigravidas educating the primigravidas. The conclusion of the study was that in the UK, women attend antenatal care because they believe it and they have been brought up to believe that antenatal care is the best way of looking after themselves and their unborn children.

Turan, Nalbant, Bulut, and Sahip (2001) reported a study on a clinic-based antenatal program for couples in Istanbul, Turkey. The program was designed to meet couples' expressed needs for information about health topics. Emphasis was placed not only on providing factual information, but also on describing the important role that fathers can play in supporting women during pregnancy, during delivery and post-partum. The main components of the program were group educational sessions, a booklet and a telephone counseling service. Topics of the educational sessions were pregnancy, childbirth, infant feeding and care, post-partum women's health and family planning. Interviews revealed that participants improved their knowledge on topics related to pregnancy, birth, infant health, infant feeding and post-partum contraception.

Turan et al. (2001) also reported a study on a community-based program for expectant fathers and expectant mothers. The study focused on the effects of antenatal education not only on post-partum health behaviors but also on health, knowledge, attitudes and behaviors during pregnancy and childbirth. The programs were offered free of charge. Health personnel presented information and used participatory techniques such as large- and small-group discussions, demonstrations, role play, games and question-answer sessions. Booklets and brochures were also provided on topics such as pregnancy nutrition, preparing for childbirth, post-partum women's health, infant care, breastfeeding and contraceptive methods. Videos on preparing for parenthood, infant care and breastfeeding were also shown and discussed. Positive effects were seen in the areas of infant health and feeding, spousal communication and support. The researchers indicated that antenatal education programs for expectant mothers as well as expectant fathers can have positive effects on their reproductive health, knowledge, attitudes and behaviors. This would in turn reduce maternal and child mortality and morbidity. There is a need, therefore, for functional MCH education programs in antenatal and postnatal clinics for expectant and nursing mothers in Nigeria, in order to reduce the unacceptable rate of maternal and child mortality and morbidity.

However, some government policies, such as the National Health Insurance Scheme, have contributed much to the prospect of infant and maternal health in Nigeria. The scheme, if well managed, can result in an 80% improvement in the health status of all Nigerians. Another health policy by the Nigerian government involved the establishment of Primary Health Care (PHC) in villages and communities. This has helped to bring health services nearer to the people (Okereke et al., 2005).

Maternal and Child Mortality and Morbidity

Maternal death, according to WHO (1997), is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy. WHO consider that maternal death can be caused by any related or aggravated problem of pregnancy or its management but not from exact cause of death of a pregnant or recently pregnant woman particularly when deaths occur outside health facilities. For this reason, WHO and others working in this field often use the broader term "pregnancy-related death" while discussing maternal death.

The terminology

Maternal Mortality Ratio (MMR) as defined by WHO, UNICEF, UNFPA (2001) is the ratio of maternal or pregnancy-related deaths to total live births, expressed per 100,000 live births.

According to WHO, UNICEF, UNFPA (2001), maternal mortality is notoriously difficult to measure for both conceptual and practical reasons. Maternal deaths are hard to identify precisely.

The maternal mortality rate in the African region is the highest in the world. In some countries, the rate is as high as 2000 deaths per 100,000 births (WHO, 1998). Abouzahr (1999) observed that maternal mortality was a neglected issue during the 1970s and early 1980s, less because health professionals in developing countries were unaware of the problem than because they lacked the tools to quantify and analyze it. Countries with the ability to measure maternal mortality were precisely those where levels were low and vice versa. UNFPA (2000) reported that ninety-nine per cent of the approximately 500,000 maternal deaths each year are in developing countries, where complications of pregnancy and childbirth take the life of about 1 out of every 48 women. It is not uncommon for women in Africa, when about to give birth, to bid their older children farewell. In the United Republic of Tanzania, mothers have a saying: "I am going to the sea to fetch a new baby, but the journey is long and dangerous and I may not return (Aoyama, 2001).

As noted by Aoyama (2001), the current major reproductive health problems in the Middle East and North Africa (MENA) region include: high maternal mortality in several countries; high fertility and a slowing of the decline in fertility rates; early marriage and high teenage fertility; increasing prevalence of Sexually Transmitted Diseases (STDs) including HIV/AIDS; and female genital cutting in Egypt and Yemen. The MMR remain high in Yemen, Egypt and Morocco. Overall, a leading cause of death among women of reproductive age is pregnancy-related illness. The major causes of maternal mortality are bleeding, infection, and pregnancy-induced hypertension; about 25-30 per cent of maternal deaths are attributable to severe bleeding.

According to WHO (1986), in Uganda, maternal mortality was studied by Rexidne Short, who reported a rate of 13.7 deaths per 1000 births at Mulago Hospital in 1961. There was a short lived decline of MMR recorded in Mulago Hospital to 2.3 and 1.2 per 1000 live births in 1969 and 1972 respectively. By 1986, MMR had risen to 4.6 per 1000 live births. Mauritius is probably the only African country which has national data available since 1954, when MMR was 349/100,000; this has gradually decreased to 117/100,000. Other population-based data come from Machakos, Kenya, where MMR was 86/100,000. In Addis Ababa, it is 457/100,000; Gambia 1025/100,000; and Tanzania hospital report 1972-73 showed a rate of 4-8/1000. Most of these studies have confirmed that infection/sepsis, obstetric haemorrhage, ruptured uterus, obstructed labour and eclampsia remain the leading cause of maternal deaths.

Maine (1999) stated that there are at least three ways in which maternal mortality is special: first, its magnitude; second, its epidemiologic nature; and third, its programmatic requirements. One of the crucial characteristics of maternal deaths is that women run this risk every time they become pregnant, and this risk adds up over their lifetime. There is little mystery about the complications that kill pregnant women, and surprisingly little difference in causes between developed and developing countries.

Abouzahr and Berer (1999) noted that community studies from around the world have found that most maternal deaths take place during delivery or in the immediate post-partum period. Almost half of post-partum deaths take place within one day of delivery and some 70 per cent occur within the first week. In other words, there is a mismatch between women's need for maternal health care and the current patterns of provision and utilization of care in developing countries where women are not, in fact, getting the care they need at the time they most need it. As stated by Abouzahr and Berer (1999), the main causes of maternal deaths can be divided according to when they arise and why:

(i) those which occur very early in pregnancy, such as ectopic pregnancy;

(ii) those which arise from the complications of abortion, that is, retained products of conception, haemorrhage, sepsis and perforated uterus, mostly due to the use of unsafe or outdated procedures;

(iii) those which arise mostly during late pregnancy, such as hypertensive disorders of pregnancy leading to eclampsia;

(iv) those which arise during labour and delivery including prolonged or obstructed labour, retained placenta, vaginal or cervical lacerations, uterine rupture or inversion, which often arise due to poor or inadequate care;

(v) those which arise from events in labour and delivery but which manifest in the first hours, days or weeks post-partum, including haemorrhage and sepsis, which are often the result of poor or inadequate care; and

(vi) those which are true post-partum complications, such as thromboembolic disease.

According to Starrs (1987) and Okafor and Olukoya (1990), for every woman who dies in childbirth, many more survive but suffer long-term damage to their health. Starrs (1987) further stated that incontinence, uterine prolapse, infertility, and other illnesses caused by complications in pregnancy and childbirth contribute to the persistent suffering and poor quality of life experienced by millions of women. He also reported that for many women, complications during pregnancy, or infection from unclean hands or unsterile instruments, can lead to pelvic inflammatory disease which, apart from pain and suffering, can lead to infertility. This is a major problem in Africa, where it affects 15 to 20 per cent of all women and is often caused by sexually transmitted infections or the complications of pregnancy.

As stated by Berer (1999), the number of health problems (morbidity) reported by women in the first months after delivery is high. Problems include anaemia and nutritional depletion exacerbated by serious blood loss and breastfeeding, backache, urinary incontinence, frequent headaches, mastitis and other breast problems, hemorrhoids, constipation, depression and anxiety, pain in the perineum and vulva following from poor repair of episiotomy and perineal tears, and unrepaired fistula or uterine prolapse, which in turn may lead to other forms of morbidity, such as constant irritation or tissue and genital infections.

Effects of maternal deaths and illnesses on members of the family

Maternal morbidity is in some cases so devastating to the personal, marital and social life of the woman that she may wish she had not survived. Maternal morbidity can thus be almost as damaging to women and their families as maternal mortality. UNFPA (2000) noted that infants and children also suffer as a result of poor maternal health. The same factors that cause maternal mortality and morbidity, including complications and the associated poor management of pregnancy and childbirth, contribute to an estimated 8 million still births and new born deaths each year.

The cost of a lost life cannot be sensibly calculated. Maternal deaths and illnesses affect women, children, spouses, extended families and communities in many ways. The economic costs of a mother's death include her lost contributions (monetary and non-monetary) to the family and its survival, increased mortality among her children, increased burden of home maintenance and child care to her survivors, and additional impacts on communities and society. UNFPA (2000) also stated that a woman's death also has a bigger negative impact on children's growth, and on school enrolment rates, particularly in poor families; younger children enroll later, and those aged 15-19 drop out earlier.

Maternal and child health education

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period (WHO, 2011). Child health is closely related to maternal health, as nutrition during pregnancy, birth conditions, birth spacing, and health status of the mother impact the health of the child prior to, during and after birth. Children represent the future, and ensuring their healthy growth and development ought to be a prime concern of all societies. MCH education includes knowledge about conception and pregnancy, prenatal growth and development of the baby, child delivery, the impact of birth experience on the child, hospital and home care experiences of the baby, feeding patterns for the baby, growth and development of the child and problems of child development (Olaitan & Akpan, 2003). The MCH education is essentially preventive and partly curative in nature, and is necessary for the good health of the mother and her child. Quality MCH education is important in preventing newborn deaths and morbidity. Addressing the complex challenge of maternal and newborn deaths and morbidity requires fully functioning health care services that give high priority to pregnancies and their outcomes. Besides this, interventions are needed at the community and policy levels to ensure that pregnancies are wanted and that women have access to the care and health education they need when they need it.

Recommendations

The care of pregnant women, mothers and their children deserves the highest priority in every community. Pregnant women and children represent high risk groups within the population. The situation is particularly serious in developing countries where the statistics show very high mortality and morbidity in these groups as compared with the rest of the population. Nigeria, the largest country in Sub-Saharan Africa (SSA), is currently estimated to have some of the most acute population and reproductive health problems in Africa. Its need for comprehensive MCH education programs to be administered in antenatal and postnatal clinics surpasses those of many countries in SSA. So in light of the above:

(i) All pregnant women must be sensitized to attend the antenatal and postnatal clinics for thorough examination.

(ii) There should be appropriate health education with respect to impact, prevention and treatment of morbidities of women in health facilities at any opportunity.

(iii) Women should be taught nutrition education for vitamin deficiencies and anaemia.

(iv) Women should be educated about family planning services.

(v) Women should be taught about prevention of sexually transmitted diseases, including HIV/AIDS.

(vi) Women should be enlightened about adequate breastfeeding.

(vii) Enlightenment campaigns on immunization should be carried out.

(viii) Provision of accessible, affordable, well-staffed and well-equipped health facilities at all levels for use by women should be ensured by the government.

(ix) The use of audio and visual aids (slides, posters, film clips, video), and handouts on MCH at the antenatal and postnatal clinics should be ensured.

(x) MCH education should be taught in local dialect to illiterate mothers.

(xi) Home Economists should incorporate the topics/issues of the content of maternal and child health education into the curriculum of Home Economics at the various levels of education.

(xii) Education of the public on danger signs of prolonged labor and regular retraining of health personnel on intrapartum care in addition to upgrading neonatal facilities are important measures necessary to reduce the currently high perinatal mortality rate in Nigeria.

Conclusion

This article has reviewed maternal and child health; maternal and child mortality and morbidity; and maternal and child health education in Africa and in Nigeria in particular. In light of the rapid population growth, ignorance, lack of education (especially on the part of women), poverty, apathy, lack of commitment (on the part of the government), corruption and increased risks of adverse environmental health exposures, maternal and child health faces many problems. It is therefore believed that a serious and objective maternal and child health education program should be called for in order to prevent any health catastrophe. It is envisaged that concrete and practical maternal and child health education sessions in antenatal and postnatal clinics could bring significant improvement in the health of Nigerian mothers and children.

Biography

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References

Abouzahr, C. (1999). Measuring maternal mortality: What do we need to know? In M. Berer & T. K. S. Ravindran (Eds.), *Safe motherhood initiatives: Critical issues* (pp. xx-xx). London: Blackwell Science Limited.

Abouzahr, C., & Berer, M. (1999). When pregnancy is over: Preventing post-partum deaths and morbidity. Maternity care in developed countries: Last 100 years. In M. Berer & T.K.S. Ravindran (Eds.), *Safe motherhood initiatives: Critical issues* London: Blackwell Science Limited.

Aoyama, A. (2001). *Reproductive health in the Middle East and North Africa*. Washington, D.C.: World Bank.

Berer, M. (1999). HIV/AIDS, pregnancy and maternal mortality and morbidity: Implications for care. In M. Berer & T.K.S. Ravindran (Eds.), *Safe motherhood initiatives: Critical issues* London: Blackwell Science Limited.

Berer, M., & Ravindran, T. K. S. (1999). Preventing maternal mortality: Evidence, leadership, resources, action. In M. Berer & T.K.S. Ravindran (Eds.), *Safe motherhood initiatives: Critical issues*. London: Blackwell Science Limited.

Ellis, M., & Castello, A. (2002). Early days- Assessing the risks for Nepal's newborns. *Id 21 Health Highlights,* June.Federal Ministry of Health (FMOH). (2000). *National reproductive health Policy*. Abuja: Author.

Imogie, A. O. (2000). The Importance of maternal health and family planning in the life of a woman. *African Journal of Education, 5*(2)

Ingalls, A. J., & Salerno, M. C. (1991). *Maternal and child health nursing* (7th ed.) St. Louis: The CV Mosby Company.

Maine, D. (1999). What's so special about maternal mortality? In M. Berer & T.K.S. Ravindran (Eds.), *Safe motherhood initiatives: Critical issues* London: Blackwell Science Limited.

Okafor, C., & Olukoya, A. A. (1990). *Safe motherhood Nigeria 1990: Women's perspectives on maternal mortality and morbidity*. Abuja: Society of Gynecology and Obstetrics of Nigeria and Family Care International.

Okereke, H. C., Kanu, I., Nwachukwu, N. C., Anyanwu, E. C., Ehiri, J., & . Merrick, J. (2005). Maternal and child health prospects in Nigeria. *The Internet Journal of Pediatrics and Neonatology,* 5(2).

Olaitan, S. O., & Akpan, A. E. (2003). *Childhood development and family life Education*. Bauchi: League of Researchers in Nigeria.

Starrs, A. (1987). *Preventing the tragedy of maternal deaths – A report on the International Safe Motherhood Conference, Nairobi, Kenya.* New York: World Bank, WHO and UNFPA.

Turan, J. M., Nalbant, H., Hulut, A., & Sahip, Y. (2001). Including expectant fathers in antenatal education programs in Istanbul, Turkey. *Reproductive Health Matters, 9*(18), 114-125.

United Nations Fund for Population Activities. (2000). *The state of world population, 2000*. Washington, D.C.: UNFPA.

World Health Organization. (1986). Maternal mortality: Helping women off the road to death. *WHO Chronicle, 40,* 175.

World Health Organization. (1997). *Communicating family planning in reproductive health, WHO/FRH/FPP/97.33,* Geneva: WHO.

World Health Organization. (1998). *Reproductive health: Strategy for African region, 1998-2007*. Harare: WHO Regional Office for Africa.

World Health Organization. (2011). http://www.globalhealth.org/view_top.php3?id=225WHO, UNICEF & UNFPA. (2001). *Maternal mortality in 1995: Estimates developed by WHO, UNICEF, UNFPA*. Geneva: WHO.

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