
“THE WORLD NEEDS HOME ECONOMICS, BUT DOESN’T RECOGNIZE IT... HOW TO UNVEIL HOME ECONOMICS”

Professor Dr Rubina Hakeem
Principal, Rana Liaqat Ali Khan Government College of Home Economics,
Stadium Road, Karachi-74800, Pakistan
rubina.hakeem@gmail.com

ABSTRACT

Home economists believe that amidst today’s challenges to human wellness home economics has great potential to ameliorate the situation. Evidences albeit sporadic, are found for potential of home economics to contribute to human wellness. Experts realize the need for kind of education that home economics has been providing since more than a century. However recognition of home economics itself as the kind of education needed today is still rare. This paper reviewed the reports and evidences of relevant situations and tried to explore the actions needed for realization of potential of home economics to contribute to human wellness. It emerges that philosophical reviews indicating potential of home economics are relatively easier to find than empirical studies verifying contribution of home economics education to human wellness. Large scale trials or systematic reviews providing robust evidence for potential of home economics probably have never been conducted. Various strategies including conduction of such trials are given for unveiling home economics.

Keywords: Home Economics, Wellness, Education

INTRODUCTION:

The concept of human wellness that lead to the emergence of human economics as a field of study in 1801 is still an unknown or new concept to most of the experts and agencies concerned with human wellness. Consequently strategies adopted for promoting human wellness and assessing progress are also focused on one or a few selected aspects of human wellness. It appears that such fragmented approaches are just changing the nature of threats to human wellness and burdens of various kinds of human miseries from one population to other without having any significant impact on overall wellness at global level. There are indications that well meaning experts often realize the need for comprehensive and preventive measures to promote human wellness but are not aware of existence of a field of study that trains people for education and research in promoting all rounded human wellness through preventive measures. The question emerges that why Home economics that exist for more than 100 years now by has yet not been recognized as promoter of human wellness.

This paper (a) reviewed the research databases (1) to assess recognition of need for wellness education by non home economics professionals; (2) to explore reasons for disregard of home

economics education as wellness education and (b) suggests strategies for removing hurdles to recognition of home economics education as wellness education.

METHODOLOGY:

Available and accessible evidence from various research databases from a variety of fields of studies were reviewed to assess the validity of assumption that homes and universal home economics education has potential for improving and sustaining human wellness at global level. Research data bases searched include Medline (U.S.National Library of Medicine, 2010), Hearth (Cornell University, 2010), SSRN eLibrary Database(SSRN, 2010) , Directory of Open Access Journals (Lund University Libraries, 2010) and Google scholar(www.google.com, 2010). Combination of search terms indicating potential link to home economics (*e.g. home economics, family studies, consumer sciences, human ecology, family, consumer, home, parents, and lifestyle etc*) and wellness (*e.g. health, wellness, wellbeing, quality of life*) were used to locate articles of interest. All abstracts and all full papers retrievable within reasonable time frame and resources were reviewed to see if it had any indication of need for home economics education

with or without using any of the names of this field of study. Research data bases as well as general articles were searched (*using search engine- Google*) to review the reasons for misconceptions about home economics and efforts made by home economist to remove those misconceptions. Based on the above mentioned reviews strategies for removing hurdles to recognition of home economics education as wellness education are suggested.

RESULTS:

Wellness includes health and a lot more. World Health Organization defined health in 1946 as "a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity"(World Health Organisation, 1946). Wellness is "an active process of becoming aware of and making choices toward a more successful existence" (National Wellness Institute, 2010).

Regardless of terminology used to describe the concept, Home Economics Education has always been focused on promoting the wellness as it is define above. Home economist believed since the beginning of the century that "organization and conduct of home is dynamic and responsive to society"; "intelligently made alterations assure optimum functioning of homes and wellness of human civilization" and "this requires definite training of dwellers in fulfilling their role as homemakers" (MacDonald & MacDonald, 1927). Betterment of individual, family and community has been the slogan of home economics education. Home economists give more importance to homes as determinants of wellness than any other field, the ultimate beneficiaries of wellness of homes are both individuals and societies. To home economists the term home includes all those units where human being live regardless of type of shelter the form of activity which are carried on, and the grouping of people to be found within the shelter (Fitzsimmons, 1950). Home economists are concerned with quality of products and services that are used by people living in homes as well as with policies and systems that influence them.

Over the years changes took place in this field of study but focus has always remained the same that is wellness of human beings. At present, International federation of home economics describes Home Economics as "a field of study and

a profession, situated in the human sciences that draw from a range of disciplines to achieve optimal and sustainable living for individuals, families and communities. Its historical origins place Home Economics in the context of the home and household, and this is extended in the 21st century to include the wider living environments as we better understand that the capacities, choices and priorities of individuals and families impact at all levels, ranging from the household, to the local and also the global (glocal) community. Home Economists are concerned with the empowerment and wellness of individuals, families and communities, and of facilitating the development of attributes for lifelong learning for paid, unpaid and voluntary work; and living situations. Home Economics professionals are advocates for individuals, families and communities. It tries to empower individuals and families to identify and create alternative solutions to significant everyday challenges and to take responsibility for the consequences of their actions in a diverse global society. The central concern of the field is the physical, economic, and socio-psychological well-being of individuals and families. From its inception in the nineteenth century, the field has used knowledge to improve people's quality of life"(International Federation for Home Economics (IFHE), 2008). Reviewing the presence of human condition concerns in home economics McGregor states , "home economics started with an unfocused concentration on well-being, moved onto an emergent understanding of wellness and basic human needs (while still holding onto well-being) and, in the process, opened the door to a normative approach to practice couched in the human condition construct"(McGregor S., 2010) .

Evidences for recognition of need for wellness education

The idea of promoting wellness through empowering education has recently gained focus in the field of medicine and to a certain extent in other fields. Evidences from medical research highlight the importance of wellness education. A brief review of evidences from medical research is given here.

Developmental Origins of Health and Disease (DOHaD) hypothesis, that originated in 1990s' assumes that prenatal conditions have life-long consequences. Evidence for impact on metabolic disease has been overwhelming and is emerging

for cognitive, social, emotional and mental health issues (Kajantie & Raikkonen, 2009; Raikkonen & Pesonen, 2009; Sullivan & Grove, 2010; Symonds, Sebert, Hyatt, & Budge, 2009; Wright & Enlow, 2008). Educational interventions have shown positive impact (Kafatos, Vlachonikolis, & Codrington, 1989; Taren & Graven, 1991). It could be interpreted from this phenomenon that human potential for wellness is primarily determined by the extent and kind of environment that any home provides to young women. Physical and psychosocial environments can facilitate or hinder young women's' nourishment through a number of ways e.g. access to appropriate food, reasonable workloads and low levels of psychosocial stress. Home economics or in other words wellness education can enhance homes potential to promote maternal and fetal wellness.

There are numerous evidences showing association between wellness of homes and occurrences of health risk for dwellers of any age. This indicates potential of home economics education for improving wellness. A few examples from each area are referenced here. Observations regarding association of home environment and injuries, infections accidental poisonings and allergies are rampant. (Sellstrom, Bremberg, Garling, & Hornquist, 2000; Cagle, Davis, Dominic, & Gonzales, 2006; Kendrick, Barlow, Hampshire, Polnay, & Stewart-Brown, 2007; Phelan, Houry, Atherton, & Kahn, 2007; Kendrick, Barlow, Hampshire, Stewart-Brown, & Polnay, 2008), (Woolf & Woolf, 2005; Erkal & Safak, 2006; Grey, Nieuwenhuijsen, & Golding, 2006), (Larson & Gomez, 2001) (Melsom et al., 2001; Wamboldt et al., 2002). Characteristics of family and parents are found to influence not only child health and development but also development of health related habits and behaviors. (Vandell & Ramanan, 1992; Sharma, 1997; McCartney, Dearing, Taylor, & Bub, 2007; Keltner, 1992; Goyen & Lui, 2002; Kolobe, 2004; To et al., 2004; Miyake et al., 2007; Rickards, Walstab, Wright-Rossi, Simpson, & Reddihough, 2007; Barlow, Powell, Gilchrist, & Fotiadou, 2008; Oei, Egan, & Silva, 1986; Sallis, Patterson, McKenzie, & Nader, 1988; Strauss & Knight, 1999; Ogden & Steward, 2000; Saelens et al., 2002; Arredondo et al., 2006; Evans et al., 2006; Golan, 2006; Salmon, Hume, Ball, Booth, & Crawford, 2006; Sebok, Schneider, & Harangi, 2006; Nanney, Johnson, Elliott, & Haire-Joshu, 2007; O'Brien et al., 2007; Villard,

Ryden, & Stahle, 2007; Matsuzuki, Muto, & Haruyama, 2008; Saied-Moallemi, Vehkalahti, Virtanen, Tehranchi, & Murtoomaa, 2008; Levin & Currie, 2009; Pearson, MacFarlane, Crawford, & Biddle, 2009; Pearson, Biddle, & Gorely, 2009) . There is enough evidence to demonstrate that home environment and families influence not only physical development and health but also intellectual development and psychological wellness of individuals. (Bradley, Caldwell, & Rock, 1988; McMichael et al., 1992; Steinberg, Lamborn, Dornbusch, & Darling, 1992; Baydar, Brooks-Gunn, & Furstenberg, 1993; Andersson, Gotlieb, & Nelson, 1997; Pridham, Becker, & Brown, 2000; Mackner, Black, & Starr, Jr., 2003; Davis-Kean, 2005; Marturano, Ferreira, & Bacarji, 2005; Roberts, Jurgens, & Burchinal, 2005; McCulloch, 2006; Tong, Baghurst, Vimpani, & McMichael, 2007; Green et al., 2009) (Furman, 1992; Harmer, Sanderson, & Mertin, 1999; Bradley, Conyn, Burchinal, McAdoo, & Coll, 2001; Posada et al., 2002; Barry, Dunlap, Cotten, Lochman, & Wells, 2005; Pachter, Auinger, Palmer, & Weitzman, 2006; Korja et al., 2008; Lim, Wood, & Miller, 2008; Maikovich, Jaffee, Odgers, & Gallop, 2008; Zevalkink, Riksen-Walraven, & Bradley, 2008)

Several large scale intervention trials have shown major role of lifestyle in proliferation of diseases both infectious and non-communicable disease. Consequently medical experts are now realizing need for contribution of non-medical professionals in the prevention of diseases. In relation to control of non-communicable diseases (NCDs), that represent a leading threat to human health and development WHO states, "Considerably more gains can be achieved by influencing policies of non-health sectors than by health policies alone. Because the management of chronic conditions requires lifestyle and daily behavior change, emphasis must be upon the patient's central role and responsibility in health care. Health care for chronic conditions must be re-oriented around the patient and family (World Health Organisation, 2002). WHO is also piloting a project titled healthy homes healthy society. Organizers of World health summit state: "Initiating and realizing adequate and tolerable conditions of life and the way we jointly think and act will be crucial to cope with the health challenges that we are facing in the next years and beyond." "The coalition of academic medicine, governments, industry and civil society will

continue to develop and monitor joint solutions to improve health worldwide” (World Health Summit, 2010).

Experts from various fields often realize the importance of what home economics teach. An expert of technology recognizing the importance of homes states: “Another reason to study technology in homes is that it is a rich research field, and has the potential to improve everyday life for millions of users. Also, work and home are intertwined now, and even if workplace concerns are paramount, it is difficult to ignore the work that gets done in homes” (Hindus D., 1999). An individual's ability to make informed judgments and effective decisions about the use and management of their money now becoming popular under the name of Financial literacy has always been integral part of home economics (Wikipedia Foundation Inc, 10 A.D.). The kind of education UNESCO is stressing now is not very different from what home economics is and has been. “UNESCO promotes a multidisciplinary approach to science and technology education and gives particular attention to the provision of basic knowledge, life skills and scientific literacy for all, as well as preparation for the world of work.educational systems are faced with the challenge of science and technology education that has lost relevance not being able to adapt to current scientific and technological developments”(UNESCO, 2010).

Life Skills-Based Education (LSBE) is being adopted as a means to empower young people refers to an interactive process of teaching and learning which enables learners to acquire knowledge and to develop attitudes and skills which support the adoption of healthy behaviors (UNICEF, 1996). This purpose is being served by home economics since 1800's. The concept written in 2007” The challenges children and young people regularly face are many, and require more than even the best numeracy and literacy skills seems to be an echo of the ideas of a home economist presents in 1927 where she stressed need for life style education and called it "fourth R of right living" (MacDonald & MacDonald, 1927). All the above observations lead to an inclination to assume that if these experts and agencies knew enough about home economics they would have simply suggested universal home economics education.

Reasons for lack of recognition of home economics as wellness education

Emergence of so many new names for the kind of education that home economics has always been giving is an evidence that world has not recognized home economics. The consequence is that use of home economics made at global level to enhance human wellness is not at par with its potential. Home economists have been trying to explore and ameliorate the situation.

Politicizing home economics as gender issue

Intentional ignorance of home economics for political reasons has been noticed and reported by many researchers (Stage & Vincenti, 1997). Feminist and progressive often consider home economics as symbol of domesticity. Politicians have also exploited support to home economics to undermine their opponents' e.g. home economics college could not be upgraded to university due to misleading and irrational propaganda about its relevance to constraining women's entry in other fields of higher education (Alvi, 2008). This politicization of home economics in Pakistan lead to lack of public support (KalPoint.com, 5 A.D.) and continues to hinder higher education and research in home economics (Hussain, 2010).

Hyper specialization

Hyper specialization has been noted as hindrance to evolution of the knowledge base of the profession. McGregor states: “To the detriment of the interdisciplinary potential of the profession, we have been successful in creating narrowly focused specialists instead of wider thinking generalists. By embracing the specialist, expert mode, we have even created artificial boundaries between different areas of our practice (food and nutrition, housing, family, consumer, and clothing and textiles) leading to the sad reality that, often, we do not collaborate with ourselves, let alone with other disciplines (McGregor, 2009).

Inappropriate design and implementation of home economics programs:

It has been repeatedly suggested by home economists that “Home economics curriculum should evolve and develop from the best knowledge available at a given point in time” (Teachers of Home Economics Specialist Association, 1988). However accomplishing this task is complex and requires a wide variety of academic resources. Meeting such requirements

has been much more difficult developing countries e.g. FAO acknowledged the need to reorient home economics curricula to better meet the needs of farmers in developing countries in 1994 (FAO, 1991).

An example of negative influence of lack of timely updates in curriculum could be given from Pakistan. Initial home economics programs introduced in 1950s were copied from USA without cultural and socioeconomic adaptations and were popular among elite class. The program failed to proliferate due to high costs of implementation and lack of evidence for promoting wellness of masses (Saeed & McClelland, 1991).

Inconsistent names and definitions of the field of study and its areas of specialization

Use of different names in different countries adds to the problem because it makes the task of convincing the policymakers about presence of home economics at global level more difficult. IFHE has correctly conceded not to change the name but to rebrand it (International Federation for Home Economics (IFHE), 2008) and active efforts are needed both for rebranding and for exposing existence of home economics with other names.

Efforts made by home economist to ameliorate the situation.

Home economist has been well aware of the problems being faced by home economists and have been giving excellent suggestions for revitalizing the field. Home economists have always been and are actively striving to redefine and update philosophy of home economics education and give worthwhile theoretical and practical suggestions for popularizing the field (Turkki, 2004; Teachers of Home Economics Specialist Association, 1988; Pendergast, 2006; McGregor, 1998; McGregor, 2007; McGregor, 2004; Heinila H, 2009). These contributions are very valuable and provide the directions for actions and need to be supplemented by hard core evidence of claims about objectives of home economics education. Non home economist would like to see evidence of efficacy of home economics education in promoting wellness. Review of literature indicates dearth of this kind of evidence. Paucity of such evidence appears graver than actual because of variations in names of the field of study and segregation of areas of specialization from the core field of study. For

example searching Medline for articles indicating need for home economics education for enhancing wellness retrieves only a couple of articles (Brennan, McCarthy, & Ritson, 2007; Crawford, 2008; Lo, Chang, Lee, & Wahlqvist, 2009).

Revitalization of IFHE has provided an excellent platform for emancipation of home economics. IFHE website is a very good source of information and has immense potential to further the cause of home economics (IFHE, 2010). Advancement in communication technology has greatly facilitated sharing of experiences and knowledge and home economists are in a better position to work towards removing of stigmas and hurdles that constrained the universal popularity of home economics. For example home economist personal websites and mailing lists are serving a very noble cause of sharing home economics related information.

Global interest in, and need for the kind of education that home economics provides has been noted by many home economists (Teachers of Home Economics Specialist Association, 1988; Pendergast, 2006; Heinila H, 2009; DARLING C.A. & KAIJA TURKKI, 9 A.D.). This presents a very good opportunity for home economists to collaborate and work for marketing their field of study. Appropriate, timely and targeted actions at this point can determine status of home economics in next centuries. A few strategies suggested on the basis of this review are given in discussion section.

DISCUSSION

How to unveil home economics

Review of home economics related situations given above shows that appropriate efforts made by home economists today may revolutionize the status of home economics at global level. Strategies to remove the hurdles that restricted popularity of home economics are given below.

Synchronization of alternative names

Name of the field of study has been an issue not because of its inherent meanings but because of the stigmas attached. The name home economics does not instantly highlight the purpose of human wellness but apparently is the most befitting name for the field used up till now. Renaming as family studies, consumer sciences,

human ecology etc has resulted in pushing the field away from the focus on home as centers of human development. Home economics is purpose and action oriented field and its various names adopted up till now in many countries denotes its either any of its function/s or domain/s rather than its purpose. It seems finding short name that encompasses and denotes all that home economics includes has been difficult. As per IFHE consensus the best option is to retain the name and rebrand the field. To contribute to this purpose of rebranding IFHE can suggest a list of acceptable alternative names for home economics and minimum set of knowledge base and competencies required for any program of home economics. The main sphere of action to realize this purpose is small i.e. home though it extends inwardly to individual and outwardly to community. Consumer science is close to home economics but not exactly home economics. Retaining the open door policy, just determining the arena of home economics and exposing the areas covered by similar fields would allow observers to understand home economics. If IFHE website devotes a page for this purpose it may make worthwhile contribution to rebranding home-economics This page can also give details of names used in various countries/states and differences in their contents. Viewers may be provided with options of online contribution and comments.

Guidance of home economists in showcasing of purpose of home economics

Since its inception the purpose of home economics has been betterment of individual, family and community, in other words betterment of humanity though for observers the meanings are not instantly apparent. The practical work of students and teachers done for learning of skills as well as judicious use of skills and other resources has greater visibility than teaching of sciences and philosophies that guide in selection and preparation of goods and use of skills. Observers are unable to see the purpose, strategies and standards related to teaching of skills and the purpose of home economics remains obscure. Several home economists have highlighted need for this showcasing. One of the missing components of home economics programs has been lack of focus philosophy of home economics and teaching components of home economics without telling enough about

home economics itself. Many entry level and even senior home economists would be unable to link all the activities their activities to purpose of home economics. They would benefit from concrete guidance in doing this. Home economics programs at level must be proactive in highlighting the purpose behind activities and training for retaining focus on purpose should ideally be made part of the home economics teaching programs curriculum. A model curriculum and set of lesson plans providing such templates to home economics teachers could be offered at IFHE website.

Fastening areas of specialization to core

As the names of various areas of specialty or have specific names not aligned to the name of the main field of study disintegration and oblivion is facilitated. Perhaps multidimensional nature of home economics limits its visibility. Though all its facets are internally tied by the core purpose of human wellness, the inner system of connections is not visible to world. Probably home economist needs to draw a connecting line on the outside facets by finding a name that has ability to tie together various areas of specialization. For Suppose if we rename home economics education as "human wellness technologies" and all its component areas have human wellness tag added (housing and interior for human wellness, apparel design and textile for human wellness, food and nutrition for human wellness, family economics for human wellness, family studies for human wellness) it may be easier for experts from other field to recognize that particular specialty as part of a larger field of study.

The term technology may be preferable to either sciences or studies because home economics is an action oriented field that makes use of both philosophy and science for planning any strategies or actions. Again IFHE website can play an important role. For example if IFHE home page has a vibrant animated representation of areas of specialization with strong emphasis on their relation to core the message would be available to all the viewers. IFHE may allow use of such animation to its affiliated bodies.

Collating and creating scientific evidence about efficacy of home economics.

We the Home economists know that home economics is wellness education and the world needs it desperately for human wellness. This

claim may not be acceptable to most observers who have been exposed to only specific aspects of home economics or only limited implementations of this extremely versatile, dynamic and transformative field of study. Balancing “empirical sciences” with “critical and interpretative sciences” as suggested by McGregor (McGregor, 2004) is important, and without losing this balance home economists need to provide evidence that is comprehensible to today’s scholars and policy makers. They are accustomed either to experiments based evidences, randomized controlled trials and systematic reviews of the same or to interpretations of large international data. Assessing association between home economics and state of human wellness or planning experiments to document impact of home economics education on human wellness is not the same as studying impact of drugs on guinea pigs or human volunteers. Controlling or matching human wellness status of cases and controls is not easy and separating effect of confounding variables during the course of interventions or observations is impossible. However efforts could be made to collect, collate and create evidence in somewhat similar manner. Home economists have made such efforts. Nosheena Saleem’s doctorate research provides evidence for significant positive impact of home economics education on wellness potential of rural households in Pakistan. We need large scale international evidences of this sort. Many may already be present in home economics colleges’ libraries. Exploring and collating such evidences from as many countries as feasible and making it available for the world to see is one of potential strategies to unveil home economics.

A step further would be planning large scale multicentre international studies to check the hypothesis that home economics education enhances human wellness. Association between home economics education and human wellness could also be assessed by securing relevant data from various countries, assessing and scoring countries for provision of home economics education and relating it to state of human wellness indicators in those countries. Collaborations between institutions to support doctoral and post doctoral research in home economics education would facilitates accomplishment of such gigantic tasks. IFHE could mediate to get support from international

agencies for such large scale projects. IFHE has done a lot to promote home economics and it is apparent that there is a lot more to do.

Acknowledgment:

It is to be acknowledged that sharing of articles by Prof. Dr Sue McGregor through emails has been an invaluable resource for writing this article

REFERENCES

- Alvi, H. (2008). Pakistani Women in a Changing Society. South Asia Citizens Web [Electronic version]. Available: <http://www.sacw.net/Wmov/alavi.html>
- Andersson, H. W., Gotlieb, S. J., & Nelson, K. G. (1997). Home intellironment and cognitive abilities in infants born small-for-gestational-age. *Acta Obstet. Gynecol. Scand. Suppl*, 165, 82-86.
- Arredondo, E. M., Elder, J. P., Ayala, G. X., Campbell, N., Baquero, B., & Duerksen, S. (2006). Is parenting style related to children's healthy eating and physical activity in Latino families? *Health Educ. Res.*, 21, 862-871.
- Barlow, J. H., Powell, L. A., Gilchrist, M., & Fotiadou, M. (2008). The effectiveness of the Training and Support Program for parents of children with disabilities: a randomized controlled trial. *J. Psychosom. Res.*, 64, 55-62.
- Barry, T. D., Dunlap, S. T., Cotten, S. J., Lochman, J. E., & Wells, K. C. (2005). The influence of maternal stress and distress on disruptive behavior problems in boys. *J. Am. Acad. Child Adolesc. Psychiatry*, 44, 265-273.
- Baydar, N., Brooks-Gunn, J., & Furstenberg, F. F. (1993). Early warning signs of functional illiteracy: predictors in childhood and adolescence. *Child Dev.*, 64, 815-829.
- Bradley, R. H., Caldwell, B. M., & Rock, S. L. (1988). Home intellironment and school performance: a ten-year follow-up and examination of three models of intellironmental action. *Child Dev.*, 59, 852-867.
- Bradley, R. H., Conyn, R. F., Burchinal, M., McAdoo, H. P., & Coll, C. G. (2001). The home environments of children in the United States part II: relations with behavioral development through age thirteen. *Child Dev.*, 72, 1868-1886.
- Brennan, M., McCarthy, M., & Ritson, C. (2007). Why do consumers deviate from best microbiological food safety advice? An examination of 'high-risk' consumers on the island of Ireland. *Appetite*, 49, 405-418.
- Cagle, K. M., Davis, J. W., Dominic, W., & Gonzales, W. (2006). Results of a focused scald-prevention program. *J. Burn Care Res.*, 27, 859-863.
- Cornell University (2010). Home Economics Archive: Research, Tradition and History (HEARTH). Albert R. <http://hearth.library.cornell.edu>
- Crawford, M. A. (2008). The elimination of child poverty and the pivotal significance of the mother. *Nutr. Health*, 19, 175-186.
- DARLING C.A. & KAIJA TURKKI, K. (2-20-0009). Global Family Concerns and the Role of Family Life Global Family Concerns and the Role of Family Life Education: An Ecosystemic Analysis. *Family Relations* 58, 14-27. Ref Type: Journal (Full)
- Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement: the

- indirect role of parental expectations and the home environment. *J.Fam.Psychol.*, 19, 294-304.
- Erkal, S. & Safak, S. (2006). An evaluation of the poisoning accidents encountered in children aged 0-6 years in Kirikkale. *Turk.J.Pediatr.*, 48, 294-300.
- Evans, A. E., Dave, J., Tanner, A., Duhe, S., Condrasky, M., Wilson, D. et al. (2006). Changing the home nutrition environment: effects of a nutrition and media literacy pilot intervention. *Fam.Community Health*, 29, 43-54.
- FAO (1991). Rural households and sustainability: Integrating environmental and gender concerns into home economics curricula. Rome: Food and Agriculture Organisation.
- Fitzsimmons, C. (1950). *The Management of Family Resources*. San Francisco: W. H. Freeman.
- Furman, E. (1992). On feeling and being felt with. *Psychoanal.Study Child*, 47, 67-84.
- Golan, M. (2006). Parents as agents of change in childhood obesity--from research to practice. *Int.J.Pediatr.Obes.*, 1, 66-76.
- Goyen, T. A. & Lui, K. (2002). Longitudinal motor development of "apparently normal" high-risk infants at 18 months, 3 and 5 years. *Early Hum.Dev.*, 70, 103-115.
- Green, C. M., Berkule, S. B., Dreyer, B. P., Fierman, A. H., Huberman, H. S., Klass, P. E. et al. (2009). Maternal literacy and associations between education and the cognitive home environment in low-income families. *Arch.Pediatr.Adolesc.Med.*, 163, 832-837.
- Grey, C. N., Nieuwenhuijsen, M. J., & Golding, J. (2006). Use and storage of domestic pesticides in the UK. *Sci.Total Environ.*, 368, 465-470.
- Harmer, A. L., Sanderson, J., & Mertin, P. (1999). Influence of negative childhood experiences on psychological functioning, social support, and parenting for mothers recovering from addiction. *Child Abuse Negl.*, 23, 421-433.
- Heinila H, S. (12-12-2009). How Domestic Skills Turn Out to be the Art of Everyday Life: Phenomenological Attitude as a Research Method in the Field of Home Economics. *Family & Consumer Sciences Research Journal*, 38[2], 158-167.
- Ref Type: Journal (Full)
- Hindus D. (1999). The Importance of Homes in Technology Research. In *Cooperative Buildings. Integrating Information, Organizations and Architecture* (pp. 199-207). Heidelberg: Springer.
- Hussain, F. (2010). The New Government's Policies, Towards Education. MAG The weekly [Electronic version]. Available: <http://www.magtheweekly.com/26/focus.php>
- IFHE (2010). International Federation of Home Economics. www.ifhe.org
- International Federation for Home Economics (IFHE) (2008). IFHE Position Statement: Home Economics in the 21st Century . <http://www.ifhe.org> [Electronic version]. Available: <http://www.ifhe.org/31.html>
- Kafatos, A. G., Vlachonikolis, I. G., & Codrington, C. A. (1989). Nutrition during pregnancy: the effects of an educational intervention program in Greece. *Am.J.Clin.Nutr.*, 50, 970-979.
- Kajantie, E. & Raikonen, K. (2009). Early life predictors of the physiological stress response later in life. *Neurosci.Biobehav.Rev.*
- KalPoint.com (5 A.D.). Personality of the week: Dr. Hameeda Khuhro Minister of Education, Govt. of Sindh. KalPoint.com (KPDC) [Electronic version]. Available: <http://education.kalpoint.com/pow/modules.php?name=News&file=article&sid=150>
- Keltner, B. R. (1992). Family influences on child health status. *Pediatr.Nurs.*, 18, 128-131.
- Kendrick, D., Barlow, J., Hampshire, A., Polnay, L., & Stewart-Brown, S. (2007). Parenting interventions for the prevention of unintentional injuries in childhood. *Cochrane.Database.Syst.Rev.*, CD006020.
- Kendrick, D., Barlow, J., Hampshire, A., Stewart-Brown, S., & Polnay, L. (2008). Parenting interventions and the prevention of unintentional injuries in childhood: systematic review and meta-analysis. *Child Care Health Dev.*, 34, 682-695.
- Kolobe, T. H. (2004). Childrearing practices and developmental expectations for Mexican-American mothers and the developmental status of their infants. *Phys.Ther.*, 84, 439-453.
- Korja, R., Maunu, J., Kirjavainen, J., Savonlahti, E., Haataja, L., Lapinleimu, H. et al. (2008). Mother-infant interaction is influenced by the amount of holding in preterm infants. *Early Hum.Dev.*, 84, 257-267.
- Larson, E. & Gomez, D. C. (2001). Home hygiene practices and infectious disease symptoms among household members. *Public Health Nurs.*, 18, 116-127.
- Levin, K. A. & Currie, C. (2009). Adolescent toothbrushing and the home environment: sociodemographic factors, family relationships and mealtime routines and disorganisation. *Community Dent.Oral Epidemiol.*
- Lim, J., Wood, B. L., & Miller, B. D. (2008). Maternal depression and parenting in relation to child internalizing symptoms and asthma disease activity. *J.Fam.Psychol.*, 22, 264-273.
- Lo, Y. T., Chang, Y. H., Lee, M. S., & Wahlqvist, M. L. (2009). Health and nutrition economics: diet costs are associated with diet quality. *Asia Pac.J.Clin.Nutr.*, 18, 598-604.
- Lund University Libraries (2010). DOAJ - Directory of Open Access Journals. Lund University Libraries. www.doaj.org
- MacDonald, E. & MacDonald, F. (1927). *Homemaking: a profession for men and women* . Boston: Marshall Jones Co.
- Mackner, L. M., Black, M. M., & Starr, R. H., Jr. (2003). Cognitive development of children in poverty with failure to thrive: a prospective study through age 6. *J.Child Psychol.Psychiatry*, 44, 743-751.
- Maikovitch, A. K., Jaffee, S. R., Odgers, C. L., & Gallop, R. (2008). Effects of family violence on psychopathology symptoms in children previously exposed to maltreatment. *Child Dev.*, 79, 1498-1512.
- Marturano, E. M., Ferreira, M. C., & Bacarji, K. M. (2005). An evaluation scale of family environment for identification of children at risk of school failure. *Psychol.Rep.*, 96, 307-321.
- Matsuzuki, H., Muto, T., & Haruyama, Y. (2008). School children's salt intake is correlated with salty taste preference assessed by their mothers. *Tohoku J.Exp.Med.*, 215, 71-77.
- McCartney, K., Dearing, E., Taylor, B. A., & Bub, K. L. (2007). Quality Child Care Supports the Achievement of

- Low-Income Children: Direct and Indirect Pathways Through Caregiving and the Home Environment. *J.Appl.Dev.Psychol.*, 28, 411-426.
- McCulloch, A. (2006). Variation in children's cognitive and behavioural adjustment between different types of place in the British National Child Development Study. *Soc.Sci.Med.*, 62, 1865-1879.
- McGregor S. (2010). Locating the human condition concept within home economics. McGregor Monograph Series No. 201002. <http://www.consultmcgregor.com> [Electronic version]. Available: <http://www.consultmcgregor.com/documents/publications/human-condition-monograph-2010.pdf>
- McGregor, S. (2004). A Satire: Confessions of Recovering Home Economists.
- McGregor, S. L. T. (1998). **Embracing a new future: A leadership imperative.** Journal of Family and Consumer Sciences, 89[3], 12-18.
- Ref Type: Journal (Full)
- McGregor, S. L. T. (2007). Intellectual showcasing: Articulating the thinking behind our practice. *NURTURE*, 1, 1-13.
- McGregor, S. L. T. (1-12-2009). Integral Metatheory: Beyond Specializations, Theoretical Pluralism, and Conventional Metatheory. Family & Consumer Sciences Research Journal, 38[2], 142-157. Mount Saint Vincent University.
- Ref Type: Journal (Full)
- McMichael, A. J., Baghurst, P. A., Vimpani, G. V., Robertson, E. F., Wigg, N. R., & Tong, S. L. (1992). Sociodemographic factors modifying the effect of interlironmental lead on neuropsychological development in early childhood. *Neurotoxicol.Teratol.*, 14, 321-327.
- Melsom, T., Brinch, L., Hessen, J. O., Schei, M. A., Kolstrup, N., Jacobsen, B. K. et al. (2001). Asthma and indoor environment in Nepal. *Thorax*, 56, 477-481.
- Miyake, Y., Ohya, Y., Tanaka, K., Yokoyama, T., Sasaki, S., Fukushima, W. et al. (2007). Home environment and suspected atopic eczema in Japanese infants: the Osaka Maternal and Child Health Study. *Pediatr.Allergy Immunol.*, 18, 425-432.
- Nanney, M. S., Johnson, S., Elliott, M., & Haire-Joshu, D. (2007). Frequency of eating homegrown produce is associated with higher intake among parents and their preschool-aged children in rural Missouri. *J.Am.Diet.Assoc.*, 107, 577-584.
- National Wellness Institute (2010). Defining Wellness. <http://www.nationalwellness.org/> [Electronic version]. Available: http://www.nationalwellness.org/index.php?id_tier=2&id_c=26
- O'Brien, M., Nader, P. R., Houts, R. M., Bradley, R., Friedman, S. L., Belsky, J. et al. (2007). The ecology of childhood overweight: a 12-year longitudinal analysis. *Int.J.Obes.(Lond)*, 31, 1469-1478.
- Oei, T. P., Egan, A. M., & Silva, P. A. (1986). Factors associated with the initiation of "smoking" in nine year old children. *Adv.Alcohol Subst.Abuse*, 5, 79-89.
- Ogden, J. & Steward, J. (2000). The role of the mother-daughter relationship in explaining weight concern. *Int.J.Eat.Disord.*, 28, 78-83.
- Pachter, L. M., Auinger, P., Palmer, R., & Weitzman, M. (2006). Do parenting and the home environment, maternal depression, neighborhood, and chronic poverty affect child behavioral problems differently in different racial-ethnic groups? *Pediatrics*, 117, 1329-1338.
- Pearson, N., Biddle, S. J., & Gorely, T. (2009). Family correlates of fruit and vegetable consumption in children and adolescents: a systematic review. *Public Health Nutr.*, 12, 267-283.
- Pearson, N., MacFarlane, A., Crawford, D., & Biddle, S. J. (2009). Family circumstance and adolescent dietary behaviours. *Appetite*, 52, 668-674.
- Pendergast, D. (2006). Sustaining the home economics profession in new times - A convergent moment. In A.Rauma, S. Pollanen, & P. Seitamaa-Hakkarainen (Eds.), *Human Perspectives on Sustainable Future* (pp. 3-32). Joensuu, Finland: University of Joensuu.
- Phelan, K., Khoury, J., Atherton, H., & Kahn, R. S. (2007). Maternal depression, child behavior, and injury. *Inj.Prev.*, 13, 403-408.
- Posada, G., Jacobs, A., Richmond, M. K., Carbonell, O. A., Alzate, G., Bustamante, M. R. et al. (2002). Maternal caregiving and infant security in two cultures. *Dev.Psychol.*, 38, 67-78.
- Pridham, K., Becker, P., & Brown, R. (2000). Effects of infant and caregiving conditions on an infant's focused exploration of toys. *J.Adv.Nurs.*, 31, 1439-1448.
- Raikkonen, K. & Pesonen, A. K. (2009). Early life origins of psychological development and mental health. *Scand.J.Psychol.*, 50, 583-591.
- Rickards, A. L., Walstab, J. E., Wright-Rossi, R. A., Simpson, J., & Reddihough, D. S. (2007). A randomized, controlled trial of a home-based intervention program for children with autism and developmental delay. *J.Dev.Behav.Pediatr.*, 28, 308-316.
- Roberts, J., Jurgens, J., & Burchinal, M. (2005). The role of home literacy practices in preschool children's language and emergent literacy skills. *J.Speech Lang Hear.Res.*, 48, 345-359.
- Saeed, F. & McClelland, J. (1991). Home Economics Curricula in Pakistan: Time for Reform? *Journal of Home Economics*, 83, 33-37.
- Saelens, B. E., Sallis, J. F., Nader, P. R., Broyles, S. L., Berry, C. C., & Taras, H. L. (2002). Home environmental influences on children's television watching from early to middle childhood. *J.Dev.Behav.Pediatr.*, 23, 127-132.
- Saied-Moallemi, Z., Vehkalahti, M. M., Virtanen, J. I., Tehranchi, A., & Murtomaa, H. (2008). Mothers as facilitators of preadolescents' oral self-care and oral health. *Oral Health Prev.Dent.*, 6, 271-277.
- Sallis, J. F., Patterson, T. L., McKenzie, T. L., & Nader, P. R. (1988). Family variables and physical activity in preschool children. *J.Dev.Behav.Pediatr.*, 9, 57-61.
- Salmon, J., Hume, C., Ball, K., Booth, M., & Crawford, D. (2006). Individual, social and home environment determinants of change in children's television viewing: the Switch-Play intervention. *J.Sci.Med.Sport*, 9, 378-387.
- Sebok, B., Schneider, I., & Harangi, F. (2006). Familiar and environmental factors influencing atopic dermatitis in the childhood. *J.Eur.Acad.Dermatol.Venereol.*, 20, 418-422.
- Sellstrom, E., Bremberg, S., Garling, A., & Hornquist, J. O. (2000). Risk of childhood injury: predictors of mothers'

- perceptions. *Scand.J.Public Health*, 28, 188-193.
- Sharma, S. (1997). Qualitative assessment of home environment across the different educational status of parents. *Indian J.Matern.Child Health*, 8, 44-47.
- SSRN (2010). SSRN elibrary. Social Science Research Network (SSRN). <http://www.ssrn.com/>
- Stage, S. & Vincenti, V. B. (1997). *Rethinking home economics: women and the history of a profession*. Ithaca: Cornell University Press.
- Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: authoritative parenting, school involvement, and encouragement to succeed. *Child Dev.*, 63, 1266-1281.
- Strauss, R. S. & Knight, J. (1999). Influence of the home environment on the development of obesity in children. *Pediatrics*, 103, e85.
- Sullivan, E. L. & Grove, K. L. (2010). Metabolic Imprinting in Obesity. *Forum Nutr.*, 63, 186-194.
- Symonds, M. E., Sebert, S. P., Hyatt, M. A., & Budge, H. (2009). Nutritional programming of the metabolic syndrome. *Nat.Rev.Endocrinol.*, 5, 604-610.
- Taren, D. L. & Graven, S. N. (1991). The association of prenatal nutrition and educational services with low birth weight rates in a Florida program. *Public Health Rep.*, 106, 426-436.
- Teachers of Home Economics Specialist Association (1988). Submission to Royal Commission on Education by Teachers of Home Economics Specialist Association. *THESA Newsletter*, 28, 20-27.
- To, T., Guttman, A., Dick, P. T., Rosenfield, J. D., Parkin, P. C., Cao, H. et al. (2004). What factors are associated with poor developmental attainment in young Canadian children? *Can.J.Public Health*, 95, 258-263.
- Tong, S., Baghurst, P., Vimpani, G., & McMichael, A. (2007). Socioeconomic position, maternal IQ, home environment, and cognitive development. *J.Pediatr.*, 151, 284-8, 288.
- Turkki, K. (2004). **Home economics in process 1992-2002 – what can we learn for the future**. In Groot-Marcus J.P. (Ed.), 20th IFHE World Congress Abstract Book (pp. 22). International Federation of Home Economics.
- U.S.National Library of Medicine (2010). PubMed. <http://www.ncbi.nlm.nih.gov/pubmed/>
- UNESCO (2010). Science and Technology Education. <http://www.unesco.org> [Electronic version]. Available: <http://www.unesco.org/en/science-and-technology/>
- UNICEF (1996). Life skills. <http://www.unicef.org/> [Electronic version]. Available: <http://www.unicef.org/lifeskills/index.html>
- Vandell, D. L. & Ramanan, J. (1992). Effects of early and recent maternal employment on children from low-income families. *Child Dev.*, 63, 938-949.
- Villard, L. C., Ryden, L., & Stahle, A. (2007). Predictors of healthy behaviours in Swedish school children. *Eur.J.Cardiovasc.Prev.Rehabil.*, 14, 366-372.
- Wamboldt, F. S., Ho, J., Milgrom, H., Wamboldt, M. Z., Sanders, B., Szefer, S. J. et al. (2002). Prevalence and correlates of household exposures to tobacco smoke and pets in children with asthma. *J.Pediatr.*, 141, 109-115.
- Wikipedia Foundation Inc (10 A.D.). Financial Literacy. Wikipedia, the free encyclopedia [Electronic version]. Available: http://en.wikipedia.org/wiki/Financial_literacy
- Woolf, A. D. & Woolf, N. T. (2005). Childhood lead poisoning in 2 families associated with spices used in food preparation. *Pediatrics*, 116, e314-e318.
- World Health Organisation (1946). WHO definition of Health. <http://www.who.int> [Electronic version]. Available: <http://www.who.int/about/definition/en/print.html>
- World Health Organisation (2002). *Innovative care for chronic diseases* Geneva: World Health Organisation.
- World Health Summit (2010). World Health Summit 2010 1st Announcement. <http://www.worldhealthsummit.org> [Electronic version]. Available: http://www.worldhealthsummit.org/files/whs2010_1stAnnouncement.pdf
- Wright, R. J. & Enlow, M. B. (2008). Maternal stress and perinatal programming in the expression of atopy. *Expert.Rev.Clin.Immunol.*, 4, 535-538.
- www.google.com (2010). Google.
- www.scholar.google.com.pk
- Zevalkink, J., Riksen-Walraven, J. M., & Bradley, R. H. (2008). The quality of children's home environment and attachment security in Indonesia. *J.Genet.Psychol.*, 169, 72-91.