

Research Paper

Promoting professionalism and self-employment in Home science

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ABSTRACT: Over the years, need based radical changes have been brought in the goals and objectives of the Home Science education for imparting culturally relevant and job oriented education for empowerment of women. But still this discipline is striving for a reputed professional status. The present study was planned to seek suggestions from the students regarding professional and self-employment orientation of Home Science Programme. The study was conducted on graduates and post graduates of College of Home Science, Punjab Agricultural University (PAU), Ludhiana, who passed out during the academic sessions from 2011-2012 to 2013-2014. Questionnaire was mailed to all 207 students but response of 185 students was received. So, the sample size for the present study was 185 respondents which encompassed 92 B.Sc., 68 M.Sc. and 25 Ph.D. pass out from the college. The findings of the study suggested the need to introduce more self-employment courses, Home Science graduates also submitted the need to increase the duration of In plant training, for developing competencies and skills in the respective fields. Therefore, future strategies must be planned in a manner so that it will cater to the needs of educational and employment/self-employment requirements of a well identified group of clients. It should aim at producing professionals who can be job creators for themselves and for others.

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In this era of globalization and technological revolution education is considered as first step for every human activity. It plays vital role in the development of human capital and is linked with well-being and opportunities for better living of an individual (Battle and Lewis, 2002). It ensures the acquisition of knowledge and skills that enables individuals to increase quality of life. This increase in productivity leads towards new sources of earning which enhances the economic growth of a country (Saxton,2000). Education is considered to be an important form of national investment for prosperity and welfare of the nation by making people literate. Literacy, therefore, is the key unit for developing skills and values in individuals. In our country when rapid technology and economic development is taking place, the academic performance of students is an area of greatest concern which plays an important role in becoming more competent, intelligent and intellectual professionals. As these professionals move higher in their life, their academic performance still remains a criterion for deciding their professional expertise (Farooq *et al.*, 2011). Even before academic performance, area/stream of specialization decides their professional success. Each specialization in education should be able to correlate knowledge with skill and economic needs in the respective areas of development, to create the qualified human resource. So, in today's era of technology, it is very important to check whether the curriculum of various streams is in linewith job avenues /market demand so that necessary orientation of curriculum could be done.

Home science is such a stream in which over the years need based radical changes have been brought for imparting eco basedculturally relevant and job oriented education for empowerment of women. The concept of Home science in the beginning centered around grooming girls for good home making to lead satisfactory life. In mid-1960's and 70's ,the need of teaching Home science in SAU's was recognized, as home being the important unit of production and consumption in agrarian countries like ours (Gaonkar, 2004). Traditionally ,career opportunities for Home science graduates were seen to be limited to the safe domain for girls like those in teaching, research and later on extension. This could be due to its clients who mostly enrolled in Home Science asa training ground for family life and management of resources of the home and also due to mindset at that point of time. Till 90's getting admission in B.Sc. Home Science was a big Challenge (George, 2004).

But with the passage of time or due to technological growth and development, girls could not be confined to domestic roles and they started opting for disciplines which enabled their professional growth as well. Since then, Home scientist have remained awakened and brought modifications in the curriculum to enable its degree holders to get absorbed in the competitive job markets. Accordingly, the professional skills of the faculty were also upgraded through faculty development and capacity building programmes of ICAR and other funding institutions. In spite of all efforts made, the Home Science Education being an important component of SAU's is unable to attract students' due to fast changing market driven education and demand professional competencies (Mann, 2010).

There is a need for projecting Home Science as a

career and profession among the public. The image of Home Science as a career and profession with all five areas of specializations should be projected nationally through mass media. One way of doing it may be trough UGC's country wide classroom. Seminars and workshops would be very helpful in projecting the image of Home Scientists as committed professionals which can contribute greatly towards national development. In order to develop new professionals who, comprehend the uniqueness of the content and process through which Home Science works, attention should be paid to integrate research and instruction in higher education. A lot has been done but still Home Science curriculum needs to be revamped to make it time and demand sensitive. Hence, the present study was planned with the following specific objectives:

- To seek the suggestions of the Home science graduates and post graduates towards the course curriculum of Home science programme.

- To obtain suggestions from respondents for strengthening Home science programme.

■ RESEARCH METHODS

Thestudy was conducted on207 graduates and post graduates of College of Home Science, Punjab Agricultural University (PAU), Ludhiana, who passed out during the academic session of 2011-12 to 2013-14. Present contact numbers and e-mail id'sof the students were obtained from secondary sources (official records of alumni of college of Home Science, PAU, Ludhiana), friends and parents of the students. Questionnaire was mailed to all 207 students but response of 185 students was received. So, the sample size for the present study was 185 respondents which encompassed 92B.Sc., 68 M.Sc. and 25 Ph.D. pass outstudents from the college.

■ RESEARCH FINDINGS AND DISCUSSION

The results obtained from the present investigation as well as relevant discussion have been summarized under following heads :

Suggestions regarding admission process :

As all the respondents were alumni of Home Science College, PAU, Ludhiana, they were asked for suggestions in admission process and other aspects of graduation in Home science. Table 1 depicts the suggestions of the respondents regarding admission procedure and eligibility criteria for B.Sc. (H.Sc.) programme and data indicate that majority of the respondents (87.56 %) suggested 10 + 2 as the eligibility criteria for B.Sc. (H.Sc.) programme. The respondents were of the view that students admitted after 10+2perform academically better than students admitted after matriculation. Only small percentage of respondents (5.4%) suggested that admission should be open to students of both level *i.e.* after matriculation and after senior secondary. Further data about stream for admission requirement revealed that majority of the respondents (54.05 %) suggested that 10+2 with medical/ nonmedical should be stream for admission requirement, followed by 10+2 with arts (23.78%) and 10+2 with arts with Home Science subject (22.16%). Nearly, half of the respondents suggested that common entrance test should be the bases to admit students to B.Sc. (H.Sc.) Programme, while 27.03 per cent of the respondents suggested that along with entrance test the merit of qualifying exam should also be taken into account. So, it can beconcluded that as far as admission procedure and eligibility criteria for B.Sc. (H.Sc.) programme is concerned students were satisfied with the present admission procedure of PAU.

Suggestions of the respondents for improving teaching in B.Sc. Home Science programme :

According to the majority of respondents (70.27%) for improving teaching in B.Sc. Home Science programme teachers should use simple language instead of bookish, 63.78 per cent desired that teachers should motivate students for class participation, while 52.97 per

Table 1 : Suggestions regarding admission procedure and eligibility criteria for B.Sc. Home Science (n=185)						
Suggestions	B.Sc. $(n_1=92)$	M.Sc. (n ₂ =68)	Ph.D. (n ₃ =25)	Total		
	f (%)	f (%)	f (%)	f (%)		
Eligibility criteria						
After 10 th	6(6.52)	4(5.88)	3(12.00)	13(7.02)		
After 10+2	81(88.04)	61(89.70)	20(80.00)	162(87.56)		
Both	5(5.43)	3(4.41)	2(8.00)	10(5.40)		
Stream for admission requirement						
10+2 with Medical/Non-medical	51(55.43)	37(54.41)	12(48.00)	100(54.05)		
10+2 with Arts	28(3.43)	11(16.17)	5(20.00)	44(23.78)		
10+2 with Arts with Home Science subject	13(14.13)	20(29.41)	8(32.00)	41 (22.16)		
Admission procedure						
Direct admission	9(9.78)	4(5.88)	-	13(7.02)		
Common entrance test only	45(48.91)	33(48.53)	15(60.00)	93(50.27)		
Entrance test + merit of qualifying exam	4(4.34)	7(10.30)	2(8.00)	13(7.02)		
Merit of qualifying exam	26(28.26)	19(27.94)	5(20.00)	50(27.03)		
Reservation	8(8.70)	5(7.35)	3(12.00)	16(8.65)		

Table 2 : Suggestions for improving teaching in B.Sc. Home Science programme (n=185)						
Suggestions	B.Sc (n ₁ =92)	M.Sc (n ₂ =68)	PhD (n ₃ =25)	Total		
Suggistions	f (%)	f (%)	f (%)	f (%)		
Motivate students for class participation	55(59.78)	42(61.76)	21(84.00)	118(63.78)		
More use of audio-visual aids	14(15.21)	11(16.17)	9(36.00)	34(18.37)		
Well-equipped class room and laboratories	23(25.00)	15(22.05)	9(36.00)	47(25.4)		
Use simple language instead of bookish	64(69.56)	44(64.7)	22(88.00)	130(70.27)		
Provide adequate number of books in college library	31(33.70)	26(38.23)	17(68.00)	74(40.00)		
Assignments should be given in the beginning of semester	16(17.40)	18(26.47)	11(44.00)	45(24.32)		
Cover course syllabus on time	28(30.43)	31(45.58)	14(56.00)	73(39.46)		
Motivate students to use library facilities	42(45.65)	37(54.41)	19(76.00)	98(52.97)		
Training of teachers for improving teaching skill	22(23.91)	18(26.47)	13(52.00)	53(28.64)		
Timely revision of curriculum	33(35.86)	24(35.30)	18(72.00)	75(40.54)		

Multiple response

cent proposed that teachers should motivate students to use library facilities Besides a good number of exstudents (40.54%) suggested timely revision of curriculum, provision of adequate number of books in college library(40%), timely completion of the syllabus (39.46 %). Apart from these suggestions, 28.64 per cent opined that teachers need to be trained for improving teaching skill, 25.4 per cent felt that class rooms and laboratories should be well equipped while 24.32 per cent suggested that assignments should be given in the beginning of semester and only 18.37 per cent felt that teachers should use more number of audio-visual aids especially latest technology. Guglani (1999) also reported that effective media and educational technologies should be utilized for classroom teaching and continuous and comprehensive evaluation should be a significant feature of the Home Science curriculum.

Opinion of students regarding nomenclature of Home Science :

A perusal of data given in Table 3 indicates the opinion of the students regarding nomenclature of Home Science. Majority of the respondents (71.9 %) wanted no change in the existing nomenclature of Home Science while others (28.1%) felt that there is a need to change the nomenclature. Further when the respondents were asked to suggest the new name, 34.61 per cent preferred Home and Community Science followed by 26.92 per cent who preferred Community Science and 11.53 per cent suggested Family and Consumer Science and 11.53 per cent opined Family and Community Science. Overall, results shows that respondents were satisfied with the existing nomenclature. However, Katyal (2004) said that nomenclature of degree in Home science is being questioned. Loss of attraction and comprehensive

attention towards this course is confronted which suggests that there is something wrong with the name itself. The prospective employers seem to be less convinced about the utility of this course. But now as nomenclature of Home science has been changed to Community Science so we have to wait and watch about the impact of nomenclature on employability of home science graduates. Swaminathan (1997) recommended that Home Science education needs to be totally reorganized. The term "Home Science" has come to mean only preparation of women for home occupations. Therefore, there is aneed to find another alternative name for Home Science Colleges like "College of Agriculture Technology and Nutrition for Women" or any other suitable title which captures the goal of the college.

Suggestions for modification in Home Science programme :

Data in Table 4 shows that 63.78 per cent of the respondents considered syllabus of core courses as appropriate. However, 36.21 per cent said that subjects like Entomology, Biochemistry, Mathematics and Organic chemistry should be removed from the B.Sc. programme. The students perceived these courses as irrelevant to the B.Sc. (H.Sc.) programme.

Majority of the respondents (62.16%) were convinced with 4-year degree programme and about 37.83 per cent suggested that it should be for 3 years duration.

Data further shows that 48.64 per cent of the respondents were satisfied with the laboratory facilities which college provided them and 35.13 per cent suggested for improvement of the laboratory facilities.

As far as practical credit hours were concerned 57.29 per cent of the students desired increase in the

Table 3 : Opinion of students regarding nomenclature of Home Science (n=185)						
Oninion	B.Sc. $(n_1 = 92)$	B.Sc. $(n_1=92)$ M.Sc. $(n_2=68)$		Total		
Opinion	f (%)	f (%)	f (%)	f (%)		
Existing nomenclature of Home Science						
No change	69(75)	48(70.58)	16(64)	133(71.9)		
Need to be change	23(25)	20(29.42)	9(36)	52(28.1)		
If change, then new name in place of Home Science						
Family and community science	5(21.74)	1(5.00)	-	6(11.53)		
Community science	4(17.4)	7(35.00)	3(33.33)	14(26.92)		
Family and consumer science	5(21.73)	3(15.00)	1(11.11)	9(17.3)		
Home and community science	7(30.43)	6(30.00)	5(55.55)	18(34.61)		
Community and applied science	2(8.70)	3(15.00)	-	5(9.61)		

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credit hours for practicals. The findings of the study are also in tune with the findings of Dangi (1992) who recommended that there is a need to make Home Science programme more vocational oriented and more practical work should be done.

Regarding modification in Rural Awareness Work Experience (RAWE),47.02 per cent of the respondents suggested that duration of RAWE should be increased and only 15.13 per cent suggested that it should be decreased.Findings are in contrary to those of Gogoi (2001) and Singh (2016) who reported that students felt that the duration of the RAWE was very long. As far as duration of In-plant training was concerned, nearly 50 per cent of the respondents reported that it should be increased as the present duration is not sufficient for developing competencies and skills in the respective fields. The findings of the study are in conformity with those of Godawat and Upadhyay (2011) who reported that studentsopined that the duration of the internship was very short. Internship for period of one semester was suggested by the respondents. They shared that In plant training caters to their educational, employment/ self-employment requirements. It also act as a catalyst in increasing visibility of the discipline among job providers. Varghese (1999) also suggested that to enhance the relevance of Home Science curriculum there is a need to vocationalise and redesigned Home Science programme.

Suggestions regarding professional orientation of H.Sc. programme :

A look on the ranks given in Table 5 shows that the students gave first rank to the suggestion of "getting B.Sc. H.Sc. degree added in the eligibility criteria of various jobs." The reason may be that in comparison to other arts and science graduation programmes B.Sc. (H.Sc.) is not equally recognized for jobs in government and non-government departments. According to the respondents IInd and IIIrdranked suggestions for professional orientation f B.Sc. programme were "increase in duration of RAWE and In-plant training" and "increase in duration of elective courses." It may be due to the reason that with increased duration of these subjects, students would be able to gain more knowledge and

Table 4 : Suggestions of the respondents for modification in B.Sc. Home Science programme(n=185)						
Suggestions	B.Sc $(n_1=92)$ M.Sc. $(n_2=68)$		Ph.D. (n ₃ =25)	Total		
Suggestions	f (%)	f (%)	f (%)	f (%)		
Core Courses						
Syllabus is appropriate	54(58.69)	47(69.11)	17(68.00)	118(63.78)		
Subjects like Entomology, Biochemistry, Mathematics and Organic						
chemistry needs to be removed from B.Sc. programme	38(41.30)	21(30.88)	8(32.00)	67(36.21)		
Duration of degree programme						
Should be three years	34(36.95)	27(39.70)	9(36.00)	70(37.83)		
Four years is alright	58(63.04)	41(60.29)	16(64.00)	115(62.16)		
Laboratories facilities						
Satisfactory	42(45.65)	37((54.41)	11(44.00)	90(48.64)		
Not satisfactory	14(15.21)	12(17.64)	4(16.00)	30(16.21)		
Need to be improved	36(39.13)	19(27.94)	10(40.00)	65(35.13)		
Practical credit hours						
Increase	57(61.95)	43(63.23)	16(64.00)	106(57.29)		
Decrease	35(38.04)	25(36.76)	9(36.00)	69(37.29)		
RAWE duration(40 days)						
Satisfactory	37(40.20)	26(38.23)	7(28.00)	70 (37.83)		
Should be increased	46(50.00)	31(45.58)	10(40.00)	87(47.02)		
Should be decreased	9(9.78)	11(16.17)	8(32.00)	28(15.13)		
In-plant training duration						
Satisfactory	31(33.69)	22(32.35)	8(32.00)	61(32.97)		
Should be increased	44(47.82)	36(52.94)	13(52.00)	93(50.27)		
Should be decreased	17(18.47)	10(14.70)	4(16.00)	31(16.75)		

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practical experience to have perfection in the skill intended to be developed. Same findings were also reported by Godawat (2004).

Devdas (1999) suggested that there is a need to analyze and reorganize Home Science undergraduate curriculum in the light of many issues such as Vocationalization problem in employment, nomenclature of Home Science education etc. It was further stated that in order to achieve the laudable objectives of Vocationalization of higher education, there is a need for industry and Home Science institution linkages. The Home Science curriculum should be based on the needs of the employers and industry should guide the institution in preparing the curriculum.

Suggestions regarding self employment orientation of Home science programme :

Ranksgiven in Table 6 clearly indicates that students gave first and second ranks to the suggestions of "Introduction of more self-employment courses" and "development of entrepreneurship knowledge among students" respectively because more self-employment oriented courses and development of entrepreneurship knowledge will develop more skills and confidence among students. Moreover, job avenues are also shrinking now days. Therefore, it becomes imperative to train students to start their own enterprise.

Third ranked suggestion by the respondents was "Intensify practical trainings" which may encourage them to initiate their own self- employment activities.

Conclusion :

The study suggested that there should be paradigm shift in the curriculum of Home Science education to make it professional and job oriented but at the same time we have to keep our eyes and ears open to make it time and demand sensitive in future. The satisfaction of the students with the current nomenclature suggest that there is a need to change the perception of the society about Home science who feels that home science degree is only meant for managing homes and is not professional. This can be done by formulating a practical market strategy to increase the visibility of Home Science as a professional degree.

Table 5 : Suggestions of the respondents regarding professional orie	(n=13	85)			
Suggestions	B.Sc. (n=92)	M.Sc. (n=68)	Ph.D. (n=25)	Total	Rank
	(f %)	(f %)	(f %)	(f %)	Raik
Introduce more professional courses	28(30.43)	22 (32.35)	9 (36.00)	59 (31.89)	V
Increase duration of elective courses	36 (39.13)	29 (42.64)	12(48.00)	77 (41.62)	III
Get B.Sc. H.Sc. degree added in the eligibility criteria of various jobs	73(79.34)	48(70.58)	22(88.00)	143(77.29)	Ι
Strengthen elective courses	31 (33.69)	16 (23.52)	15(60.00)	62 (33.51)	IV
Make H.Sc. subject compulsory for girls at school level	19 (20.65)	11 (16.17)	9(36.00)	39 (21.08)	IX
Conduct surveys to determine job requirements in the market	22 (23.91)	14 (20.58	8(32.00)	44 (23.78)	VIII
Increase credit hours of H.Sc. elective courses	14 (15.21)	9 (13.23)	6 (24.00)	29 (15.67)	Х
Increase in duration of RAWE and In-plant training	46 (50.00)	38 (55.88)	19(76.00)	103(55.67)	II
To facilitate trainers, guideline should be provided to placement	24 (26.08)	15 (22.05)	11(44.00)	50(27.02)	VII
organization					
For in-plant training student should be place in their home towns	27 (29.34)	18 (26.47)	7 (28.00)	52(28.10)	VI
Multiple response					

Table 6 : Suggestions of the respondents regarding self-employment orientation of B.Sc. H.Sc. programme						
Suggestions -	B.Sc. (n ₁ =92)	M.Sc. (n ₂ =68)	Ph.D. (n ₃ =25)	Total	Rank	
	f (%)	f (%)	f (%)	f (%)		
Intensify practical training	16(17.39)	2 (33.33)	17(68.00)	56(30.27)	III	
Introduce more self employment courses	57(61.95)	41 (60.9)	20(80.00)	118(63.78)	Ι	
Develop entrepreneurship knowledge among students	49(53.26)	44 (64.70)	23(92.00)	116(62.70)	II	
Introduce P.G. diploma in each area of H.Sc.	18(19.56)	23(33.82)	13(52.00)	54 (29.18)	IV	
Give more individual project work to students	22(23.91)	16(23.52)	9 (36.00)	47 (25.40)	VI	
Final year only for practical work	18(19.56)	20(29.41)	14(56.00)	52 (28.10)	V	

Multiple response

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