

# The potential of interprofessional education in the field of health: Analysis of the impact of an interprofessional education experience in the Italian-speaking part of Switzerland

Bianchi M., Caiata-Zufferey M., Meli G., Di Giulio P., Pedrazzani C.

Department of Business Economics, Health and Social Care – University of Applied Sciences and Arts of Southern Switzerland (SUPSI)

## Background

Interprofessional education (IPE) can be considered as one of the key factors for the development of positive attitudes for interprofessional collaboration (IPC) in health care. Although the literature highlights the potential of IPE for the development of attitudes to IPC, there is still little evidence on the real impact of this type of pedagogical approach.

This study explores the effectiveness of IPE among Bachelor students in nursing, occupational therapy and physiotherapy who have followed an educational path that integrates IPE at the University of Applied Sciences and Arts of Southern Switzerland (SUPSI).



Since 2006, the curricula in nursing, occupational therapy and physiotherapy at SUPSI promote IPE within a structured, continuous and progressive path, which takes place over 6 semesters and allocates 52 ECTS, out of a total of 180, to courses which are common to the three curricula.

## Methods

A three-step mixed research plan was adopted.

1. A quantitative study to measure attitudes to IPC in four different populations: 1st yr, 3rd yrs students; alumni after 1 and 2 yrs of employment. The Attitudes towards Health Care Teams scale (ATHCT) (Curran et al., 2008) was administered after translation and cultural adaptation (face validity).
2. A qualitative study to explore the students' experience of IPE and how this learning process changes once people have entered the world of work with in-depth interviews.
3. Analysis and integration of quantitative and qualitative data (triangulation process).

## Results

- In the quantitative study a total of 324 questionnaires were collected. In the qualitative study, 51 interviews were done with 3rd yrs students (15); alumni after 1 yr (9); alumni after 2 yrs (14); health professionals working with SUPSI alumni (13).
- Through the statistical and thematic analysis of the data and their integration, it was possible to explore the impact of IPE on IPC attitudes, the persistence of its effects over time, the learning process that it generates and the change of competences once the person is inserted in the world of work.

## The Attitudes towards Health Care Teams scale (ATHCT)

STATEMENT	SD	Dv	W	Av	SA
1. Patients/clients receiving interprofessional care are more likely than others to be treated as whole persons.					
2. Developing an interprofessional patient/client care plan is necessary when consulting.					
3. The give and take among team members helps them make better patient/client care decisions.					
4. The interprofessional approach makes the delivery of care more efficient.					
5. Developing a patient/client care plan with other team members avoids errors in delivering care.					
6. Working in an interprofessional manner unnecessarily complicates things most of the time.					
7. Working in an interprofessional environment keeps most health professionals enthusiastic and interested in their jobs.					
8. The interprofessional approach improves the quality of care to patients/clients.					
9. In most instances, the time required for interprofessional consultations could be better spent in other ways.					
10. Health professionals working in teams are more responsive than others to the emotional and financial needs of patients/clients.					
11. The interprofessional approach permits health professionals to meet the needs of family caregivers as well as patients.					
12. Having to report observations to a team helps team members better understand the work of other health professionals.					
13. Hospital patients who receive interprofessional team care are better prepared for discharge than other patients.					
14. Team meetings foster communication among team members from different professions or disciplines.					

Scale adapted from: Heilmann, GD, Schmitt, MH, and Farnell, MP. Attitudes toward health care teams. In Heilmann, GD, and Zales, AM (Eds.) Team performance in health care. Assessment and Development (pp. 155-159). New York: Kluwer Academic/Plenum Publishers, 2003.

## ATHCT overall scores

	First year students (N=115)	Third year students (N=106)	P*	Alumni after 1 year (N=48)	Alumni after 2 years (N=55)	P**
<b>General scale</b>						
Mean (DS)	3.9 (0.3)	4.1 (0.4)	0.02	3.8 (0.5)	4.1 (0.3)	0.004
(range)	(1.9-4.8)	(3-5)		(2-5)	(3-5)	
<b>Quality of care</b>						
Mean (DS)	4 (0.4)	4.1 (0.4)	0.05	3.9 (0.6)	4.1 (0.4)	0.00
(range)	(1.6 - 4.8)	(3-5)		(2-5)	(3-5)	9
<b>Time constraints</b>						
Mean (DS)	3.7 (0.7)	3.9 (0.6)	0.05	3.6 (0.7)	3.9 (0.7)	0.03
(range)	(1.3 - 5)	(3-5)		(1-5)	(2-5)	

## Characteristics of the quantitative sample

	First year students (N=115)		Third year students (N=106)		P^	Alumni after 1 year (N=48)		Alumni after 2 years (N=55)		P^
	N	%	N	%		N	%	N	%	
<b>Gender</b>										
Female	85	73.9	81	76.4	0.07	42	87.5	34	61.8	0.003
<b>Age mean – (SD)</b>	22.3	(5.1)	25	(6.2)	0.001	25.8	(2)	27.2	(3)	0.09
<b>Bachelor Nursing</b>			73	68.9		23	47.9	31	56.4	0.7
<b>Physiotherapy</b>			20	18.9		18	37.5	17	30.9	
<b>Occupational therapy</b>			13	12.1		7	14.6	7	12.7	

In all groups the attitudes towards interprofessionality are very positive.

Although minor, there are significant differences in average scores between first and third year students, for all dimensions of interprofessionality, as well as between professionals with 1 and 2 years' experience.

## The path of SUPSI students in relation to the IPC: From individual learning to organizational learning

	STUDENTS Familiarization with interprofessionality	ALUMNI + 1 Yr The incubation of interprofessionality	ALUMNI + 2 Yr The commitment to interprofessionality
<b>CONCEPT OF INTERPROFESSIONALITY</b>	A wealth of knowledge and skills acquired	A wealth of knowledge and skills tested	A wealth of knowledge and attitudes reworked
<b>PROCESS CONCERNING INTERPROFESSIONALITY</b>	Learning as a demanding and delicate process	Transfer as a process of attributing meaning to interprofessional lived experiences	Organizational learning as a personalized actualization process
<b>CHALLENGES OF INTERPROFESSIONALITY</b>	The interprofessionality at the expense of identity	The urgency of building one's role in the workplace	The resistances of the context

## Qualitative data help to explain quantitative data

- IPE allows students to familiarize themselves with IPC through the acquisition of a wealth of knowledge, skills, basic attitudes and the ability to reflexively and critically process their professional experiences.
- The decline of attitudes to IPC in Alumni +1 Yr (quantitative data) can be explained by an "incubation" phenomenon: if on the one hand, they realize that the acquired knowledge must be tested and transferred to the workplace, on the other hand, their attention towards IPC tends to temporarily suspend to allow them to concentrate their energies in building their professional role.
- The increase of attitudes to IPC in Alumni +2 Yr (quantitative data) can be explained by a lower concern about building their professional role and their renewed ability to ensure an active commitment to implement and develop IPC.

## Conclusions

IPE has a relevant impact on student attitudes towards IPC with significant differences between first and third year students.

The effects of IPE persist two years after the end of the training. However, they do not follow a continuous and stable line due to a phenomenon of incubation related to the efforts of recent graduates to adapt to the new work contexts.

The commitment of the teachers is a crucial factor of motivation and reinforcement of the learning process.

IPC, as it has been learned, is a wealth of knowledge, attitudes, and modes of action that naturally change over time depending on the professional context with which people come into contact.

During training, students must be helped to consider identity building as a dynamic process that takes place in a continuous relationship with their belonging group but also with colleagues from other disciplines.