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Tuning Nursing Educational in an Italian academic context

Anna Marchetti, Giulia Venturini, Michele Virgolesi, Mary Gobbi, Gennaro Rocco, Ausilia Maria Lucia Pulimeno, Alessandro Stievano, Michela Piredda, Maria Grazia De Marinis

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Author’s detail: name, qualification, e-mail address and telephone number/fax

Anna Marchetti (First and corresponding author)
RN, MSN, PhD student, Department of Biomedicine and Prevention Tor Vergata University, Rome, Italy
E-mail: anna-marchetti@virgilio.it
Tel. +393453064060

Giulia Venturini
PhD, MSN, RN Tor Vergata University Hospital, Rome, Italy
E-mail: giulia.venturini@uniroma2.it
Tel. +3906/20908425

Michele Virgolesi
RN, MSN, PhD student, Department of Biomedicine and Prevention Tor Vergata University, Rome, Italy
E-mail: michele.virgolesi@libero.it
Tel. +393331165703

Mary Gobbi
Senior Lecturer in Nursing University of Southampton, Southampton, United Kingdom
E-mail: m.o.gobbi@soton.ac.uk
Tel. 023 8059 8270 - 023 8059 7990

Gennaro Rocco
Director Centre of Excellence for Nursing Scholarship, Rome, Italy

E-mail: genna.rocco@gmail.com

Tel. +3906/37511597 - Fax +3906/45437034
Ausilia Maria Lucia Pulimeno
Director Educational Pillar- Centre of Excellence for Nursing Scholarship, Rome, Italy
E-mail: lia.pulimeno@uniroma1.it
Tel. +3906/37511597 - Fax +3906/45437034

Alessandro Stievano
Researcher Centre of Excellence for Nursing Scholarship, Rome, Italy
E-Mail: alessandro.stievano@gmail.com
Tel. +3906/37511597 - Fax +3906/45437034

Michela Piredda
PhD, MSN, RN Campus Bio Medico University Hospital, Rome, Italy
E-mail: m.piredda@unicampus.it
Tel. +3906225418118 - Fax. +39 0622541456

Maria Grazia De Marinis
Professor of Nursing, Campus Bio Medico University, Rome, Italy
E-mail: m.demarinis@unicampus.it
Tel. +3906/225411051

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Ipasvi Rome. The authors thank all the nursing lecturers who participated.
Abstract: Background: The European Union Bologna Process has laid the foundation for a common European competence based educational framework. This is particularly relevant for professional programmes like nursing which operate within a European legislative framework soon to include competences. In many countries, nursing education is in transition from vocational to higher education, with many diverse systems. The competence-based approach provided by the project Tuning Educational Structures offers a common and coherent framework able to facilitate the implementation of the principles underpinning the Bologna Process reform.

Objectives: This study aimed to ascertain the relevance that Italian nursing university lecturers attributed to the 40 competences of the Italian version of the nursing Bachelor and Master's Degrees. These competences were developed through adoption of the Tuning Methodology in the nursing context.

Setting: The study was conducted in the 4 Universities of one Region of Italy which offer nursing Bachelor and Master's Degrees.

Participants: 164 Italian university nursing lecturers.

Methods: Using a four point scale, a cross sectional survey was conducted from March 2011 to April 2012. Participants evaluated each competence according to its relevance for Bachelors or Masters Education. Frequency analysis was conducted.

Results: The significance for each competence of Tuning was rated very high by Italian lecturers and appeared to overlap partially with the original European study. In Italy, the most relevant competences for Bachelor's Degree were the skills associated with the use of appropriate interventions, activities and skills in nursing and the skills associated with nursing practice and clinical decision-making. For Master's Degree, leadership, management and team competences were the most important.

Conclusions: The Tuning Nursing Project was accepted by the Italian lecturers. The competence-based approach was considered by Italian lectures as a support enabling to reflect on the current Italian nursing education cycles of study and to ensure shared visions and common approaches between Italian and European lecturers. This also confirms the applicability of Tuning to the European context.
Introduction
The most important European revolution of recent years in education occurred with the Bologna Process (1999) (Davies, 2008; European Ministers of Education, 1999), whose aim was to create a European Higher Education Area (EHEA) capable of generating academic quality, economic development and social cohesion that allows students and lectures to move freely in the countries of the European Community (Davies, 2008; Jackson et al, 2009). The Bologna Process has laid the foundation for a common European educational framework able to harmonize higher education systems, to generate convergence of curricula, skills and recognition of academic qualifications (Zabalegui et al., 2006; Dante et al., 2012). This enables competitive cultural growth and employment of professionals in the Member States of the European Union (Davies, 2008).

Despite the successful reform, in Europe there are still different systems of nursing education (Spitzer and Perrenoud, 2006, Gobbi, 2014). While the ‘nurse responsible for general care’ is regulated by the EU Directive 2005/36 concerning the mutual recognition of qualifications (and its successor the ‘Modernised’ Directive 2013/55), and is entitled to ‘freedom of movement’, the reality of mobility is challenged due to the country differences (Gobbi, 2014). For many years, it has been argued that a competence-based approach could potentially provide a frame of reference for the various educational policies (Fordham, 2005) to meet the need of common training standards in a globalized world (Baumann and Blythe, 2008). At the same, programmes must meet the health needs of national and local populations.

Despite the progress achieved with the agreement on a competence-based approach, this method still generates confusion about competence definition and measurement at qualifying examination (Yanhua and Watson, 2011; Garside and Nhachena, 2011; Cowan et al., 2005) and about the categories and areas of expertise to be included in the curricula (Salminen et al., 2009).

In order to facilitate the development of core generic and subject specific competences across different disciplines in Europe, a project called Tuning Educational Structures was launched in 2000. This is a university driven project which aims to offer a concrete approach to implement the Bologna Process at the level of higher education institutions and subject areas. The Tuning Educational Structures project provides an approach to (re-)designing, develop, implement, evaluate and enhance quality first, second and third cycle degree programmes. The project focuses not on educational systems, but on educational structures with emphasis on the subject area level, that is the content of studies. The name Tuning is chosen for the process to reflect the idea that universities do not and should not look for uniformity in their degree programmes or any sort of unified, prescriptive or definitive European curricula but simply look for points of reference, convergence and common understanding, maintaining the rich diversity of European education (Tuning Project, 2005).

The outcome of each Tuning subject area was a set of validated subject specific competences at Bachelors and Masters level to provide a frame of reference within the European space. These competences were accompanied by illustrative good practices in learning, teaching, assessment and quality improvement.
Nursing joined the project in 2003, producing its first output in 2006 and then an updated revision in 2011 (Gobbi, 2011; Zabalegui et al., 2006; Salminen et al., 2009). Part of the methodology for the establishment and validation of the competences was the distribution of a survey inviting stakeholders to rate the competences for their relevance and importance. The original subject specific competences (23) were broken down into 40 items for individual evaluation by stakeholders, as some competences contained more than one criterion. The competences were clustered into 6 specific domains (Tuning Project, 2010; Zabalegui et al., 2006; Gobbi, 2011).

This competence-based approach has prompted many countries to rethink and reform nursing education. For example, in Spain (Zabalegui and Cabrera, 2009), Finland (Ministry of Education, 2010; Råholm, Hedegaard et al., 2010) and in Denmark (Gobbi, 2009; Råholm, Hedegaard et al., 2010) the Tuning skills have been used in the design of the different levels in nursing academia, while in the United Kingdom (UK) the same reform of education ended with the acceptance of complete and articulated Tuning skills in the curricula (NMC, 2010; Gobbi, 2011; Zabalegui et al., 2006).

Italy was one of the first countries to adapt the university system to the reform of Bologna Process, introducing the current structure of the three-cycles degree (Masia, 2007). To date, in fact, the Italian nursing education is divided into Bachelor’s Degree, Master’s Degree and Doctorate Degree. The Italian Master's Degrees differ from the Italian "Masters", one-year specialist courses similar to Postgraduate Diplomas, which do not give access to further study levels (Ministry of University, 1999; Ministry of Education, 2004). In 2013 in Italy 16,268 places have been decreed for the courses of Bachelor in nursing, of which the highest concentration is found in the Region subject of this study, which owns approximately 25% of available seats decreed at national level (Mastrillo, 2013).

One important problem of Italian nursing higher education is related to the lack of a clear definition of core nursing skills and effective educational heritage that students possess at qualifying examination. In addition, Italian nursing education is based on the training objectives rather than on a competence-based approach (De Marinis et al., 2013). It is important to know if the Tuning Project Nursing can become, even for Italian nurses, a valid support to tune the nursing university courses of the country on the demands and needs identified by the European Community (De Marinis et al., 2013).

The aim of this study was to evaluate the relevance that Italian nursing lecturers of the 4 Universities of one Region of Italy (among the most representative) attribute to the 40 competences of first and second cycle (Bachelor’s and Master’s degree in nursing) included in the Italian version of the Tuning Nursing Educational. In fact, the English original version of the questionnaire was translated and validated into Italian (Venturini et al., 2012).

**Methods**

A cross-sectional survey was conducted from March 2011 to April 2012. The Italian version of the self-report questionnaire was sent by e-mail to all lecturers in nursing of the 4 Universities of one Region of Italy.
The lecturer's permission were obtained through previous e-mail of Italian national Board (Federation of Colleges IPASVI) to invite them to participate in the study.
The importance attributed to each specific skill in the two different courses of study was rated on a 4-point Likert scale (from 1=none, to 4=strong). Frequency was calculated through SPSS statistical software.
The opinions of the Italian lecturers were subsequently compared with the European vision of study courses provided by the Bologna Process (Socrates National Agency, 2005).

**Results**
The Italian version of the *Tuning Nursing Education* was mailed to 165 nursing lecturers, 149 (90%) of whom responded to survey.
To facilitate reading of results, Figure 1 shows the 40 competences clustered into 6 specific domains in according to *Tuning Project Nursing* (2010).

Insert “Table 1. The 40 Tuning competences into 6 domains” here.

Figure 1 portrays the ranking of the competences according to their degree of importance.
All competences, both of Bachelor’s and Master’s degree, reported values higher than 2.5.
Insert “Figure 1. Values assigned to individual competences in first cycle of studies” here.

The competences regarding Bachelor’s Degree that earned the highest scores, in order of importance, were (Figure 1):

1. **Ability to practice in a holistic, tolerant, non-judgmental, caring and sensitive manner, ensuring that the rights, beliefs and wishes of different individuals and groups are not compromised**;
2. **Ability to recognize and interpret signs of normal and changing health/ill health, distress, or disability in the person (assessment/diagnosis)**;
13. **Ability to practice principles of health and safety, including moving and handling, infection control; essential first aid and emergency procedures (using nursing skills, activities/interventions to provide optimal care)**.

The competences 14, 12 and 13 belong to the **skills associated with the use of appropriate interventions, nursing activities and skills aimed at providing optimal care** (Domain 3); the competence 8 belongs to the **skills associated with nursing practice and clinical decision-making** (Domain 2) and, finally, the competence 2 belongs to the **skills associated with professional values and the role of the nurse** (Domain 1).
On the contrary, the lowest values in Bachelor’s degree were registered for the following competences:

35) Ability to lead and co-ordinate a group, delegating care appropriately and meaningfully;
40) Awareness of the principles of health/social care funding and use of resources effectively;
38) Ability to critically use tools to evaluate and audit care according to relevant quality standards;
5) Ability to adjust their role to respond effectively to population/patient needs. Where necessary and appropriate is able to challenge current systems to meet population/patient needs.

The competences 35, 40 and 38 belong to the leadership, management and team competences (Domain 6) and the competence 5 belongs to the skills associated with professional values and the role of the nurse (Domain 1).

The competences regarding Master's degree that earned the highest score, in order of importance, were (Figure 2):

6) Ability to accept responsibility for his/her own professional development and learning, using evaluation as a way to reflect and improve upon his/her performance so as to enhance the quality of service delivery;
5) Ability to adjust their role to respond effectively to population/patient needs. Where necessary and appropriate is able to challenge current systems to meet population/patient needs;
39) Ability to educate, facilitate, supervise and support nursing students and other health/social care students or workers;
25) Relevant knowledge of the research process and current nursing research that can be appropriately applied to nursing actions nursing activities to provide nursing care that is rigorous and evidence based;
38) Ability to critically use tools to evaluate and audit care according to relevant quality standards.

The competences 6 and 5 belong to the skills associated with professional values and the role of the nurse (Domain 1); the competences 39 and 38 belong to the leadership, management and team competences (Domain 6) and the competence 25 belongs to the knowledge and cognitive competences (Domain 4).

In contrast, the lowest values in Master's degree were registered for the following competences:

19) Relevant knowledge of theories concerning the nature and challenge of professional practice that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty;
14) Ability to safely manage medications and other therapies (using nursing skills, activities/interventions to provide optimal care);
15) Ability to consider emotional, physical and personal care needs, including meeting the need for comfort, nutrition, personal hygiene and enabling the person to maintain the activities necessary for daily life (using nursing skills, activities/interventions to provide optimal care);
16) Ability to respond to a person’s needs throughout the life span and health/illness experience e.g. pain, life choices, revalidation, invalidity or when dying (using nursing skills, activities/interventions to provide optimal care);
8) Ability to recognize and interpret signs of normal and changing health/ill health, distress, or disability in the person (assessment/diagnosis).

The competence 19 belongs to the knowledge and cognitive competences (Domain 4); the competences 14, 15 and 16 belong to the skills associated with the use of appropriate interventions, nursing activities and skills aimed at providing optimal care (Domain 3) and the competence 8 belongs to the skills associated with nursing practice and clinical decision-making (Domain 2).

Insert “Figure 3. Average distribution of the 40 core competences in first and second cycle of studies in Italy” here

The scores obtained for Bachelor’s and Master’s degree were connected to each other (Figure 3).
The competences obtaining a score strongly different between Bachelor’s and Master’s degree were as follows:

5) Ability to adjust their role to respond effectively to population/patient needs. Where necessary and appropriate is able to challenge current systems to meet population/patient needs;
14) Ability to safely manage medications and other therapies (using nursing skills, activities/interventions to provide optimal care);
15) Ability to consider emotional, physical and personal care needs, including meeting the need for comfort, nutrition, personal hygiene and enabling the person to maintain the activities necessary for daily life (using nursing skills, activities/interventions to provide optimal care);
35) Ability to lead and co-ordinate a team, delegating care appropriately and meaningfully;
38) Ability to critically use tools to evaluate and audit care according to relevant quality standards;
40) Awareness of the principles of health/social care funding and uses resources effectively.

The competence 5 belongs to the skills associated with professional values and the role of the nurse (Domain 1); the competences 14 and 15 belongs to the skills associated with the use of appropriate interventions, nursing activities and skills aimed at providing optimal care (Domain 3) and the competences 35, 38 and 39 belong to the leadership, management and team competences (Domain 6).

The competences that obtained almost the same score between Bachelor’s and Master’s degree were:
1) Ability to practise within the context of professional, ethical, regulatory and legal codes, recognizing and responding to moral/ethical dilemmas and issues in day to day practice;

10) Ability to critically question, evaluate, interpret and synthesis a range of information and data sources to facilitate patient choice;

11) Ability to make sound clinical judgments to ensure quality standards are met and practice is evidence based;

20) Ability to learn and apply the social, health and behavioral sciences applied to nursing practice, patient/client care and situations of uncertainty;

21) Ability to learn and apply the ethical theory, law and humanities applied to nursing practice, patient/client care and situations of uncertainty;

24) Relevant knowledge of problem solving, decision making and conflict theories that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty;

26) Ability to communicate effectively (including the use of new technologies): with patients, families and social groups, including those with communication difficulties.

The competence 1 belongs to the skills associated with professional values and the role of the nurse (Domain 1); The competences 10 and 11 belong to the skills associated with nursing practice and clinical decision-making (Domain 2); the competences 20, 21 and 24 belong to the knowledge and cognitive competences (Domain 4) and the competence 26 belongs to the communication and interpersonal competences (including technology for communication) (Domain 5).
Discussion

This study describes the relevance that the Italian nursing lecturers of the 4 Universities of one Region of Italy attribute to the 40 competences of Bachelor’s and Master’s Degree in nursing contained in the Italian version of the Tuning Nursing Educational (Venturini et al., 2012).

It should be said that Italian lecturers had any reliability and validity information about questionnaire in previous e-mail but had not worked with Tuning competences prior to the study.

The lecturers attributed high importance to all of the Tuning competences of Bachelor’s and Master’s degree. The high scores obtained implies that these competences may be considered core for both levels of nursing education. While in Bachelor’s degree the most relevant were considered the skills associated with the use of appropriate interventions, activities and skills in nursing and the skills associated with nursing practice and clinical decision-making, for Master’s degree the lecturers considered essential the acquisition of the leadership, management and team competences. The latter competences are perhaps unsurprising given the fact that Master’s Degree is undertaken post registration.

These results seem to be in accordance with the guidelines of the Italian national Board (Federation of Colleges IPASVI) and the national legislation, where the first course of study focuses on the development of clinical skills, while Master’s degree focuses mainly on the development of managerial skills and training (National Federation of Colleges IPASVI, 2002; Ministry of Education University and Research, 2004). This is confirmed by data emerging from the study, in particular by comparing competences of Bachelor’s and Master’s degree, where it is clear that the skills that are considered as core in Bachelor’s degree, are those which obtained the lowest score in Master’s degree and vice versa.

This suggests that the Italian education interprets Bachelor’s and Master’s degree as processes of ‘additional training’, while, according to the Bologna Process, the post-graduate courses should provide a ‘deepening training’ of all basic skills already developed in Bachelor’s degree (Socrates National Agency, 2005).

In both study courses the skills associated with professional values and the role of the nurse seem important, but with different meanings: while in Bachelor’s degree professional values and role are spent by providing direct care, in Master’s degree the responsibility of nurses is outlined in connection with the current system, the changes and improvements that one can put in place to raise the quality of the services provided.

The competences that showed the same level of importance in both cycles were more general, therefore, less ‘typifying’ the two courses of study. These competences regard: awareness of the professional roles in health care, nurses responsibilities and functions, ethics and rights in daily activities, critical thinking, knowledge of social aspects of care and communication skills.

Since all Italian lecturers respondent agreed on the importance of the items of the Tuning Nursing Educational, this could ensure that a common approach will be used in Italy during the design of the curricula with the educational objectives of the European lecturers.

In addition, even the lecturers who participated in the consultation for the validation of the Italian version of Tuning Nursing Educational believe that the Tuning skills need a strong enhancement in the basic and post-
basic education and in the qualifying examination at the end of the three years nursing degree course (Venturini et al., 2012).

Limitations
The study has two pivotal limitations. Firstly, it included only lecturers from a specific area of Italy. Other stakeholders different from nursing lecturers should also have been included. Secondly, the lack of integration of the Italian version of the Tuning Nursing Educational with the new version published by the European consulting group in June 2012 (Tuning Project, 2012), limited the comparability of the results.

Conclusion
To tune with Europe means to start a critical comparison for a better and more extensive verification of the guidelines that should be given to the future competences. The topic of competence-based learning in recent years has been the catalyst for the Italian and European educational debate and still it seems to underline an urgent need for educators, policy makers, social and economic experts, for enabling young people to cope with the market challenges and to contribute effectively to the societal and economic life of their countries (Petracca, 2005).
In Italy, the competence-based approach still has to find full application and declination in the official teaching documents and in the effective tools and assessment. However, results from this research suggest that the Tuning Nursing Project, using the Italian version of Tuning Nursing Educational, was accepted by the Italian lecturers. In fact, the results were also self-reported and Italian lecturers had not worked with Tuning competences prior to the study. It appeared to be a consensus concerning the competences required by nurses at Bachelor pre-registration level and at Masters level. In this sense, the Bologna descriptors indicate that there is a deepening of competences at masters level, but this has to be accompanied by further exploration of competences that reflect the needs of registered nurses when they lead and manage clinical teams.
This is a good start to ensure a common approach by Italian and European lecturers to planning learning activities and teaching strategies. It means to tune the Italian university nursing degree courses to the demands and needs of the European Community and to allow the international expendability of the final learning outcomes (Tuning Project, 2005).
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Figure 1. Values assigned to individual competences in first cycle of studies
Figure 2. Values assigned to individual competences in second cycle of studies
Figure 3. Average distribution of the 40 core competences in first and second cycle of studies in Italy
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<thead>
<tr>
<th>Domains</th>
<th>Tuning Project Nursing Competences</th>
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| **Domain 1**  
Professional values and nursing roles | 1. Ability to practise within the context of professional, ethical, regulatory and legal codes, recognising and responding to moral/ethical dilemmas and issues in day to day practice.  
2. Ability to practise in a holistic, tolerant, non judgmental, caring and sensitive manner, ensuring that the rights, beliefs and wishes of different individuals and groups are not compromised.  
3. Ability to educate, facilitate, promote, support and encourage the health, wellbeing and comfort of populations, communities, groups and individuals whose lives are affected by, ill death, distress, disease, disability or death.  
4. Awareness of the different roles, responsibilities and functions of a nurse.  
5. Ability to adjust their role to respond effectively to population/patient needs. Where necessary and appropriate is able to challenge current systems to meet population/patient needs.  
6. Ability to accept responsibility for his/her own professional development and learning, using evaluation as a way to reflect and improve upon his/her performance so as to enhance the quality of service delivery. |
| **Domain 2**  
Nursing practice and clinical decision-making | 7. Ability to undertake comprehensive and systematic assessments using the tools/frameworks appropriate to the patient/client taking into account relevant physical, social, cultural, psychological, spiritual and environment factors.  
8. Ability to recognise and interpret signs of normal and changing health/ill health, distress, or disability in the person (assessment/diagnosis).  
9. Ability to respond to patient/client needs by planning, delivering and evaluating appropriate and individualised programmes of care working in partnership with the patient/client, their carers, families and other health/social workers.  
10. Ability to critically question, evaluate, interpret and synthesis a range of information and data sources to facilitate patient choice.  
11. Ability to make sound clinical judgments to ensure quality standards are met and practice is evidence based. |
| **Domain 3**  
Nursing skills, interventions, and activities | 12. Ability to maintain patient/client dignity, advocacy and confidentiality (using nursing skills, activities/ interventions to provide optimal care).  
13. Ability to practice principles of health and safety, including moving and handling, infection control; essential first aid and emergency procedures (using nursing skills, activities/ interventions to provide optimal care).  
14. Ability to safely administer medicines and other therapies (using nursing skills, activities/ interventions to provide optimal care). |
15. Ability to consider emotional, physical and personal care needs, including meeting the need for comfort, nutrition, personal hygiene and enabling the person to maintain the activities necessary for daily life (using nursing skills, activities/ interventions to provide optimal care).

16. Ability to respond to a person’s needs throughout the life span and health/illness experience e.g. pain, life choices, revalidation, invalidity or when dying (using nursing skills, activities/ interventions to provide optimal care).

17. Ability to inform, educate and supervise patient/carers and their families (using nursing skills, activities/ interventions to provide optimal care).

| Domain 4  
Knowledge and cognitive competences |
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<tr>
<td>18. Current and relevant knowledge of the theories of nursing and nursing practice that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty.</td>
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<td>19. Relevant knowledge of theories concerning the nature and challenge of professional practice that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty.</td>
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<td>20. Ability to learn and apply the social, health and behavioral sciences applied to nursing practice, patient/client care and situations of uncertainty.</td>
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<td>21. Ability to learn and apply the ethical theory, law and humanities applied to nursing practice, patient/client care and situations of uncertainty.</td>
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<td>22. Relevant knowledge of technology and health care informatics that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty.</td>
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<td>23. Relevant knowledge of international and national policies that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty.</td>
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<td>24. Relevant knowledge of problem solving, decision making and conflict theories that can be appropriately applied to nursing practice, patient/client care and situations of uncertainty.</td>
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<td>25. Relevant knowledge of the research process and current nursing research that can be appropriately applied to nursing actions nursing activities to provide nursing care that is rigorous and evidence based.</td>
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| Domain 5  
Communication and interpersonal relationships |
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<td>26. Ability to communicate effectively (including the use of new technologies): with patients, families and social groups, including those with communication difficulties.</td>
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<td>27. Ability to enable patients and their carers to express their concerns and worries and can respond appropriately e.g. emotional, social, psychological, spiritual or physical worries.</td>
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<td>28. Ability to appropriately represent the patient/client's perspective and act to prevent</td>
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<td>Domain 6</td>
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**Table 1.** The 40 *Tuning* competences into 6 domains [Adapted from: Tuning Project, 2010].
Research highlights

- The Italian lecturers consider very important all of the *Tuning* competences of first and second cycle (Bachelor’s Degree and Master’s Degree).
- The *Tuning* competences considered *core* in the first cycle are deemed less important in the second cycle and vice versa.
- The Italian nursing education interprets the levels of studies as processes of ‘additional training’.
- The competences associated with *professional values and the role of the nurse* have the same importance in both cycles of studies.