Aims and objectives. To determine whether a specific training course will enhance empathic skills in student nurses during a 3-year degree course. The study considers levels of empathy in student nurses and assesses whether these can be increased.

Background. Empathy is accepted as a critical component of supportive relationships. Many scholars have argued that empathy provides health professionals with the capacity to improve the health of patients, so it should ideally be taught to make health professionals more responsive to patient needs.

Design. Cohort longitudinal study.

Methods. Data were collected using the Italian version of the Balanced Emotional Empathy Scale (BEES). The study was designed to guarantee repeated measurements of levels of emotional empathy in the pre- and postintervention phases. This allowed us to evaluate the development and improvement of empathy and to measure the effects of extra training on the students’ empathy skills. Two groups took part in the study: the Intervention and the Control Groups. Students in the Intervention Group attended additional seminars and laboratories in small groups with tutors to learn and develop communicative and empathic abilities.

Results. One hundred and three participants (76% women) completed the study. Data showed that the training course was effective, especially for women: BEES scores 31–60 at pre-intervention phase and 42–91 at the end of the academic course. Results regarding men were less clear, and the study discusses these unexpected, anomalous findings.

Conclusion. According to literature, men and women have different empathic traits, and we found that they show disparate empathic tendencies. More women than men took advantage of the training course. In any case, our data show that specific training courses are effective.

Relevance to clinical practice. As our study shows, empathy is a skill that may be taught. So it would be advisable to introduce these into the traditional nursing curriculum.

Key words: cohort longitudinal study, communication skills, empathic tendency, nursing students, training

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Introduction

Empathy is a social-affective dimension at the basis of interaction and relationships. To be socially competent, it is not enough to be able to perceive the thoughts and actions of others. Rather, we must be in harmony with what others feel, namely sharing their emotions and sentiments. Empathising means understanding, sharing and creating an internal space to accept the other person, hence helping them to feel understood and not alone (Bonino 2006, Gallese 2007).
Empathy is a major component of the relationship between patient and nurse and is an observable and teachable skill that nurses are requested to possess (Ozcan et al. 2010). In other words, empathy has been accepted as an ability or skilled behaviour that can be learned and developed through education and practice. That is why during the undergraduate years of education, nursing students are taught the importance of empathic relationships with their patients and are expected to gain basic communication skills (Dokmen 1997, Reynolds et al. 1999, Öz 2001, Wikström 2003, Ancel 2006, Stepien & Baernstein 2006, Hojat 2007, Norfolk et al. 2007). Results from Israeli and Italian studies (Elizur & Rosenheim 1982, Hoffmann et al. 2007) show that students in the field of medicine report higher levels of empathy and lower levels of alexitymia than undergraduate students in other sciences (Economics, Physics, Chemistry, etc.), but lower levels of empathy and higher levels of alexitymia than students who specialise in the helping professions in the psychosocial area (Psychology, Psychiatry, etc.). Some authors (Hojat et al. 2009, Ward et al. 2009) have argued that technological, diagnostic and therapeutic approaches may lead to students losing the human perspective in the patient–nurse relationship; furthermore, the evidence-based approach, which is considered to be the royal road to advances in general medicine, can also lead to a false idea that empathy is outside the realm of evidence-based medicine and, thus, has no importance in the education of nurses.

Aims and hypotheses

The goals of the present study were to test whether the traditional, standard academic training of nursing students increases their subjective empathic tendencies and whether specific laboratories or seminars are able to promote further improvement.

Specifically, our expectations were the following: (1) subjective empathy levels in nursing students assessed at the end of academic training were higher than levels at the beginning of the academic course; (2) at the end of academic training, mean empathic levels were significantly higher in nursing students who attended additional laboratories, planned to manage the patient–nursing relationship in an empathic style, than in students who did not attend (traditional training). Both these hypotheses were tested against the null hypothesis that no change in empathic levels would be found.

Background

Empathy is widely accepted as a crucial component of a supportive relationship. Many scholars have argued that it provides health professionals with the capacity to ameliorate the health of their patients. The quality of the relationship with the patient can influence the course and outcome of illness (Alligood 2005).

Current research in psychology tends to consider empathy as a cognitive-emotional process. From this perspective, the empathiser is thus conscious of being in tune with the other person’s emotive state and role in the world. However, there still remains the matter of the interaction between the cognitive and emotional elements of the process in empathic behaviour.

With regard to the role of the cognitive aspects of the empathic process, developmental psychologists Bonino et al. (1998) suggested that it is possible to identify various empathic responses according to a continuum that consists of various levels of differentiation determined by a combination of factors and cognitive mediation in processes that become more and more sophisticated. The first stage of the developmental process of empathy is characterised by emotional contagion, that is, intense emotional sharing beyond cognitive control which can lead to the caregiver avoiding and/or refusing the relationship, particularly when the feelings involved are distressing. The second stage is parallel sharing empathy, where cognitive mediation still does not reach an adequate level of differentiation between the caregiver and the subject possibly resulting in the attribution of the caregiver’s own emotions and sentiments. Neither of these phases is not strictly linked to particular ages: sometimes an adult can regress to parallel sharing empathy or to emotional contagion. Very often, this contagion induces a potentially sharing person to avoid and/or refuse the relationship when the feelings involved are distressing. The last stage, appropriately named empathy, involves conscious awareness of the use of cognitive mediation, on one hand, and the sharing of elements of the emotional state, on the other (Eisenberg 2000). As Mehrabian (1996, p. 2 unpublished data) stated, ‘Emotional Empathy is defined as one’s vicarious experience of another’s emotional experiences – feeling what the other person feels [...] An important additional characteristic of more empathic persons is that they tend to be more interpersonally positive’.

Caring means giving attention to, worrying about, and feeling personally responsible for patients or ensuring that their needs are satisfied by others (Corbin 2008). This requires an understanding of the health problems of the person and their family, as well as trying to improve the patient’s psychological, physical and social comfort. It also means communicating in an adequate way, so as to build a supportive relationship (Watson 2002, Finfgeld-Connett 2008). For this reason, effective communication is never
separate from empathy, and at the same time, it is thanks to this capacity to sense and understand someone else's feelings as if they were one's own, which cognitive aspects come together with emotional and motivational aspects.

In their literature review, Yu and Kirk (2008, 2009) pointed out that many studies, using various instruments, have confirmed the importance of empathy in the nursing context. According to them, the instruments may be classified on the basis of the theoretical model of empathy they refer to, that is, their focus on cognitive, emotional, behavioural dimensions or some/all of these. For instance, they mentioned the Hogan Empathy Scale (1969), the Interpersonal Reactivity Index (Davis 1980), the Jefferson Scale of Physician Empathy (Hojat et al. 2001), the Balanced Emotional Empathy Scale (BEES) (A. Mehrabian, 1996, unpublished data), the Empathy Construct Rating Scale (La Monica 1981), the Layton Empathy Test (1979), the Reynolds Empathy Scale (2000), the Perception of Empathy Inventory (Wheller 1995) and the Barrett-Lennard Relationship Inventory (1978). After deep analysis of these and conditions of their use, the authors conclude that a 'gold standard' measure of empathy in the nursing context does not exist (Yu & Kirk 2008, 2009).

Nevertheless, they acknowledge that empathy in the helping relationship has neither a single definition nor a means of measurement. While empathy is not a new concept in nursing, the most recent publications support the value of education in the modern nursing environment. Educators of nurses have the possibility of improving the empathy skills of nurses, and this has been the subject of several studies with various outcomes. In fact, all these studies underline that empathy can be developed. Moreover, among students in the field of medicine, they found the same gender differences as reported by literature for the general population (Eisenberg et al. 1983, Mehrabian et al. 1988, Klein & Hodges 2001, Hein & Singer 2010).

Although these studies have shown that it is possible to increase the empathic abilities of nurses (Wheller & Barrett 1994, Cutcliffe & Cassedy 1999, Ancel 2006, Ozcan et al. 2010), no clear indications of contents, methods, outcomes or timing of training to be offered in nursing education exist. In addition, the various different curricula, the disagreement about the best setting for learning empathy and the assessment of levels of empathy come about through self-reporting instruments rather than objective measures being employed (Brunero et al. 2010). Moreover, most experimental studies use a pretest/post-test design without either a control group (CG) or a convenience sample instead of a randomised one, and this means that researchers are unable to evaluate the impact during empathy training over a given length of time (Brunero et al. 2010).

Methods

Research design

A quantitative cohort longitudinal design was used to conduct the study, and two groups of nursing students participated. The research was designed with the specific aim of guaranteeing repeated measurements of empathy levels in the two groups of students.

In the first group, empathy levels were assessed during the general briefing, which took place before the first internship of the academic training programme (in the first year of the academic course). During their normal academic training programme, they attended a didactic training experience involving seminars and laboratories for small groups with tutors and the aim was that students learned and developed communicative and empathic abilities. Strategies for teaching included for example movie frames, followed by a guided examination of the situation concerning nurse–patient/family relationships and individual and pair exercises on specific communication skills, role playing and discussions (Table 1). The training programme of laboratories lasted 12 hours (first year), 5 hours (second year), 4 hours (third year) and 21 hours in total. Students’ empathy levels were measured again before the last internship examination (third year). We labelled this first group: Intervention Group (IG).

In the second group, as for the first group, subjective empathy levels were assessed during the general briefing before the first internship of the academic training programme and again before the last internship examination at the end of the academic course (third year). These students attended the traditional/standard academic training course for nurses but did not take part in the seminars and laboratories. We named this group: CG.

Early measurements of IG and CG were taken during the Academic Year 2007/2008. Final assessment was carried out during the Academic Year 2009/2010.

The research design allowed us to evaluate the development of empathy and to assess the effects of extra training on the IG students' empathy skills. The use of a longitudinal design is in fact recommended as a consistent approach for evaluating skills development and changes in variables (Polit & Beck 2003). In any case, this research design included intermediate steps that were planned to measure other variables, which were not the focus of the present study and therefore are not mentioned here. These are the five factors of the Italian version of one of the most used personality tests (Costa & McCrae 1992).
Theoretical framework of training

Carl Rogers’ theory (Rogers 1951) is the specific framework for a ‘person-centred approach’ characterised by congruence, empathy and acceptance of others. The nurse must be a professional and not the friend of the patient, although, to accomplish this role, he/she must be emotionally close to the patient. The patient’s agenda model is an instrument to facilitate the knowledge of his/her personal and clinical history and to explore his/her illnesses (Moja & Vegni 2000) in an empathic sharing process that enables the nurse to care, stay by his/her side and accompany the patient through the adaptation phase. Active listening, open questions and reflective answers concerning the patient’s experiences, worries and perspectives were considered and selected as part of the training course.

How to teach empathy

The didactic pathway employed in the training plan centres on small groups, according to the Bion learning experience model (1962), which promotes among the students a circular communication of feelings experienced and the ‘here and now’ (hic et nunc) emotional difficulties in the laboratory.

The Dokmen Empathy Classification was used (Ancel 2006). This comprises a process, at the first stage called ‘Other’, where people answer questions referring to social stereotypes (what others think and feel), rather than concentrating on the real problem. This first stage of the process is inadequate and of little value; at the second stage, ‘I’, people respond to a critical situation involving others, giving advice and evaluating the problem by means of a personal interpretation and by transferring their own feelings and experiences; at the third stage, labelled ‘You’, people put themselves in the other’s shoes to understand the problem, emotions and feelings the patient is going through, subsequently reflecting on what they have learned with the aim of giving understanding and support.

A crucial aspect in developing empathic competences comes through the growth of awareness of cognitive processes, especially emotional processes. There are two ways of developing self- awareness: direct and indirect (Strepparava 2006). In the case of the indirect approach, the Medical Humanities studies were used, as learning comes from shared reflections on the narrative experiences of disease (films and literature). In the first year, the basic principles consist of nurturing the idea that controlled exercise of the mechanisms concerning the sharing of emotions leads to emotional adaptation during contact with the patient. This is a process that arises from identification with the characters in the film (‘that is me’ and ‘I feel like him/her’), the empathic process is

The table below provides a summary of the specific training on empathy: aims, contents and strategies.

<table>
<thead>
<tr>
<th>Standard expected</th>
<th>Hours</th>
<th>Method</th>
</tr>
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<tbody>
<tr>
<td>‘Starting helping relationship’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Session ‘Giving attention to people’</td>
<td></td>
<td></td>
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<tr>
<td>2. Session ‘Listening to oneself and others’</td>
<td></td>
<td></td>
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<tr>
<td>Self monitoring and observation of others (congruence between verbal and non-verbal communication);</td>
<td>4</td>
<td>Seminar: The helping relationship in nursing; the patient agenda model</td>
</tr>
<tr>
<td>Capacity to listen to one’s own emotions and recognise those of others;</td>
<td>8</td>
<td>Laboratory (14 students): Video projection of films; Individual exercise on prejudice; Couple exercise on listening; Guided discussion with lecture</td>
</tr>
<tr>
<td>Acquisition of more awareness about emotions and prejudices which play a role in the helping relationship; Active listening skills</td>
<td></td>
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<tr>
<td>‘Communication techniques in helping relationships’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify basal methods of helping relationship following Rogers’ style (listening, questioning, answering); Apply basal methods in helping conditions with low-emotional impact (anxious patient during presurgery phase, patient subject to invasive medical investigations, family support)</td>
<td>4</td>
<td>Laboratory (12 students): Video projection of films; Individual exercises on cases; Role playing (all students played the nurse role with a ‘patient’); Guided discussion with lecture and group feedback</td>
</tr>
<tr>
<td>‘Managing the helping relationship’</td>
<td></td>
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<tr>
<td>Managing complex relationships using communication skills (aggressive family members, patient with anxiety, physical imbalance communicating unpleasant news, grief)</td>
<td>2</td>
<td>Role playing (all students played the nurse role with a dissembled patient); Observation of relational behaviours with structured guide and individual feedback</td>
</tr>
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thus developed (how can I help him/her with these sensations I share?). The direct approach, on the other hand, involves working ‘directly’ (in first person) on relationships and/or communication using role-playing methods. This approach was used in the second and third years, because students are able to develop a better understanding of their own abilities by changing roles in a relationship. The goals each year were varied.

Participants

All the nursing students attending their first year in 2007/2008 at Verona University were invited to take part in the study. They were informed about the research goals and steps: specifically each student received a sheet reporting the research aim, the instruments and the techniques which would be used and information about the length of time of the study. Participants were selected by means of a convenience sampling without any randomisation: participation was voluntary, and researchers guaranteed that the students would preserve their anonymity through the use of a code system. Each student received 0.5 credits as a consequence for taking part in each stage of the study. In any case, the researchers guaranteed participation in the training course to all students, even if they withdrew from the study.

As the number of participants considered to be statistically relevant for the study is generally established at about 100 participants, the starting point at the beginning of the study was 221 students, 150 for IG and 71 for CG. The students of IG and CG gradually decreased during the course of the study:

1. One hundred and fifty students of IG in $T_0$ decreased to 62 in $T_3$;
2. Seventy-one students of CG in $T_0$ decreased to 41 in $T_3$.

Therefore, there was an overall participation attrition rate from $T_0$ to $T_3$ of 58.66% in IG and of 42.25% in CG, which is in line with the literature on longitudinal studies (Goldstein 1979, Bergman & Magnusson 1990). The principal reasons for this decrease were because of causes such as voluntary withdrawal from the study, definite withdrawal from the academic course and absence for illness at the time of data collection. Thus, in total, 103 students attending the Nursing Course at Verona University took part in the study and 76% of them were women. Of these, 15 male (24.2% of the IG) and 47 female students were involved during the 3 years of the course (2008–2010) in specific training the goals of which were to improve their level of emotional empathy (IG). The other 10 men (24.2% of the CG) and 31 women took part in the traditional/standard training (CG) (see Research design). The average ages of the two groups at the moment the final examination of their internship were not significantly different ($p > 0.05$). It is noted that for both, IG and CG, chi-square tests for gender and Student’s t-tests for age did not reveal any statistical differences between groups in $T_0$ and $T_3$ ($p > 0.05$).

Data collection

The Italian version of the Balanced Emotional Empathy Scale (BEES) by A. Mehrabian (1996, unpublished data) was used to measure participants’ empathy levels, in terms of:

1. susceptibility to becoming vicariously involved other’s emotional feelings,
2. tendency to develop positive interpersonal relationships.

The BEES includes 30 items. They are designed to reduce social desirability and acquiescence biases (Sartori 2005): 15 items are worded such that agreement to them shows higher emotional empathy. The remaining 15 items are worded such that the disagreement to them shows higher emotional empathy. In A. Mehrabian’s original version (1996, unpublished data), a nine-point scale was used, from $-4$ to $+4$. In the Italian version by Meneghini et al. (2006), the scale was reduced to a seven points, according to a series of methodological considerations. In this way, the participants expressed their level of agreement/disagreement on a seven-point scale (from $-3$ to $+3$). Completion requires about 10 minutes.

The validity process of the Italian version of the BEES showed five dimensions (Meneghini et al. 2006):

1. ‘Impermeability to the emotional feelings of others’: seven negatively worded items describing situations involving one or more strangers in which the subject is not willing to be emotionally involved;
2. ‘Susceptibility to the emotional feelings of others’: six positively worded items describing a person who is willing to be involved in others’ feelings, who shares people’s suffering, and who shares the joy and release of people who are happy;
3. ‘Emotional spread responsiveness’: seven items that refer to the tendency to identify oneself with the characters in films, plays, stories, etc.;
4. ‘Susceptibility to emotional involvement with people nearby’: six positively worded items that regard feelings shared in the presence of people suffering;
5. ‘Tendency to avoid emotional involvement with fragile people’: such as children and old people (four items).

Data analysis

Data were entered and analysed using SPSS (Statistical Package for the Social Sciences), version 16.0 (SPSS Inc., Chicago, IL, USA). Descriptive statistics such as frequencies,
percentages, means and standard deviations (SD) were used to summarise the characteristics of participants and the scores obtained in the BEES. Statistical comparisons between different mean scores (at the beginning and at the end of the study, in IG and CG, etc.) were tested by carrying out Student’s t-tests or ANOVAs where appropriate. A 0·05 p-value was used statistically significant.

Results

In $T_0$, the BEES mean total score was 30·19 (SD = 17·2) for IG and 31·56 (SD = 20·4) for CG. In $T_3$, both the mean total scores showed an increase: 37·87 (SD = 16·5) for IG; 35·07 (SD = 17·4) for CG.

While there were no statistical differences ($p > 0·05$) between the mean total scores of the two groups (IG vs. CG), both in $T_0$ (30·19 vs. 31·56) and $T_3$ (37·87 vs. 35·07), or between the mean total scores in $T_0$ and $T_3$ for CG (31·56 vs. 35·07), there was a statistical difference between the mean total scores in $T_0$ and $T_3$ for IG (30·19 vs. 37·87, $p = 0·047$) (see Fig. 1). Figure 1 also shows that IG ‘overtakes’ CG.

As shown in Fig. 2, the ‘overtaking’ effect is because of the women rather than the men, and this holds for both IG and CG (see Fig. 2).

As for $T_0$, no statistical differences were found between men and women, either for IG or for CG. As for $T_3$, the difference the mean total scores in the BEES between men and women was statistically significant for IG ($p < 0·05$) but not for CG ($p > 0·05$). More specifically, in $T_3$, the women belonging to IG presented significantly higher scores statistically than the men ($p < 0·02$) in four dimensions of five (1. ‘Impermeability to the emotional feelings of others’, 2. ‘Susceptibility to the emotional feelings of others’, 3. ‘Emotional spread responsiveness’ and 4. ‘Susceptibility to emotional involvement with people nearby’). However, there were no statistically significant differences of this kind for IG in $T_3$ ($p > 0·05$). Furthermore, only for women of IG was the statistical difference between $T_0$ and $T_3$ significant ($p < 0·05$).

Finally, if we put together the men ($n = 25$) and women ($n = 78$) belonging to both IG and CG, it becomes possible to compute the following statistics and observe the following phenomenon (Fig. 3):

1. In $T_0$, BEES mean total score for men was 28·08 (SD = 19·0) and women 31·59 (SD = 18·3); there was no statistical difference between men and women ($p > 0·05$);
2. In $T_3$, BEES mean total score for men was 25·96 (SD = 15·0) and women 40·22 (SD = 15·9); there was a significant statistical difference between men and women ($p < 0·001$);
3. The statistical difference between $T_0$ and $T_3$ in men (28·08 vs. 25·96) was not significant ($p > 0·05$);

Figure 1 Balanced Emotional Empathy Scale (BEES) mean total scores for Intervention Group (IG) and Control Group (CG), in $T_0$ and $T_3$.

Figure 2 Balanced Emotional Empathy Scale (BEES) mean total scores for men and women belonging to Intervention Group (IG) and Control Group (CG), in $T_0$ and $T_3$.

Figure 3 Balanced Emotional Empathy Scale (BEES) mean total scores for men and women belonging to both Intervention Group (IG) and Control Group (CG), in $T_0$ and $T_3$. 

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The statistical difference between \( T_0 \) and \( T_3 \) in women (31.59 vs. 40.22) was significant (\( p < 0.001 \)).

Discussion

Empathy is the quality responsible for creating a caring environment. Several nursing theorists have identified empathy as a crucial component of caring.

The present study evaluated the effect of a specific empathy training course for nursing students on empathic tendency. The effect of this training was assessed using the Italian version of the BEES by A. Mehrabian (1996, unpublished data) and longitudinal research design. The hypotheses of the study were that there would be (1) a higher level of empathy at the end, rather than at the beginning of the Nursing Education period for all the students and (2) significantly higher empathy levels in the students that had attended a specific training course on empathy, rather than in those that received standard training.

The aim of the first hypothesis was to verify the effect on emotional empathy of standard academic training: the expectation was that during the 3 year of the nursing course, students would improve their level of empathic tendency. There is, in fact, a need to improve relational skills in nursing training along with the technical abilities to meet patients’ caring requests. Our data showed that traditional training meets this goal, but we were interested in whether this plus value could be improved with a specific intervention planned to involve students in seminars, laboratories and role-playing techniques. For this reason, we focused our longitudinal study on the effects that these techniques have on emotional empathy that led us to the second hypothesis.

The results related to the second hypothesis showed that only IG women significantly increased their level of emotional empathy after taking part in the specific training course on empathy. In the same way, CG women (Fig. 2) showed an increase in emotional empathy, despite not doing any specific training, although this increase was not statistically significant. The training course was more effective for women as compared to men.

As can be seen, in this study, both the CG and IG men (particularly the latter) revealed a lower emotional empathy profile than the two female groups (Fig. 2). In spite of the fact that the initial levels in the both male groups were low, it is possible to see that this is particularly true for the group of male students who attended the specific training course (IG): the difference is not significant but is greater than the difference between the two female groups (Intervention and CG) which started from similar levels of emotional empathy. For this reason, we believe that the comparison is more reliable between the two female groups. Moreover, in both male groups, the number of subjects is low, so the comparison between the two groups might be lacking in significance and reliability. Regarding the initial levels of emotional empathy in the men, we might also note that, because they start from an extremely low score in emotional empathy (Fig. 2), it could be that it was harder for them to be influenced by specific training, and thus, it was less easy to increase in empathy levels. This issue could be discussed in further research. Indeed, a study aimed at understanding these differences between the two genders better should start from different aims and requires the same numbers of participants in the groups of women and men. This objective was not part of our study which, on the contrary, was planned to highlight the efficacy of a specific training course for nursing students, keeping, as far as possible, the sample examined representative (ecological approach), compared with the total number of nursing students. However, our results are in line with the literature on gender differences in empathy: men and women have been found to have different empathic traits (Eisenberg & Lennon 1983, Klein & Hodges 2001, Baron-Cohen & Wheelwright 2004, Hein & Singer 2010). This fact is confirmed by the author of the scale (A. Mehrabian, 1996, unpublished data; Mehrabian et al. 1988, Cunico 2005, Meneghini et al. 2006) and is present in specific literature on health research (Newton et al. 2000, Shapiro et al. 2004, Hojat et al. 2009). Women seem to possess greater emotional empathy and are therefore more ready to be emotionally active. This difference can be partly attributed to the different way that the two genders socialise in our society, where women are brought up to be more sensitive to interpersonal stimuli, to acquire expressive traits such as empathy and to show interest in and care for the emotional reactions of children (i.e. maternal role). It is considered that women occupy a more expressive role, and they are responsive to the needs and feelings of others and show and experience a wider range of sentiments. On the contrary, men are expected to have a more instrumental role for which abilities in management, problem solving and emotional control are required (Mehrabian et al. 1988, Klein & Hodges 2001). This would therefore explain why, throughout the ages, women (as compared to men) are more inclined to choose the nursing profession.

Beyond the gender differences, we wish to emphasise the efficacy of the use of some form of training. Several studies show that specific training courses aimed at developing empathy are effective (Elizur & Rosenheim 1982, Wheller & Barrett 1994, Cutcliffe & Cassedy 1999, Ancel 2006, Ozcan et al. 2010). A comparison between various training courses could be risky because of the lack of homogeneity regarding...
the factors involved: tools, education, programs, setting,
environment, etc. Nevertheless, findings from research (ours
included) are encouraging, because they suggest that training
can be useful in developing empathy in nursing students, even
if it may be that our specific training course cannot be used in
every context.

Efficacy and limits of the training course on
empathy
As a consequence of the training course, the students of IG had
a chance to self-monitor and develop awareness of their
personal limits and difficulties, in addition to efficiently
managing their relationships with the ‘mock’ patients. More-
over, they received feedback from the tutors at the end of each
session. Both the contents of feedback and the way it was
offered were greatly appreciated by all the students.

Nevertheless, one ought to mention some weak points in this
training course. First and foremost, there is a need for a
considerable amount of resources: expert tutors in the field of
communication and relationships and a great deal of time to
prepare the texts in the dialogues, actors (mock patient) and
individual written exercises. To facilitate the learning process,
the nursing supervisor should be alongside the students during
contact with the patient and their family in both standard
situations and more difficult ones and should provide super-
vision and feedback (Suikkala & Leino-Kilpi 2001, Clementi
& Brugnolli 2005, Odone et al. 2006). In fact, international
literature on the subject indicates an increase in empathy levels
in students who participate in a specific empathy training
course. The studies show that empathy is a skill that may be
taught. However, problems in communication training con-
tinue to exist both during and after education (Wheller &
Barrett 1994, Cutcliffe & Cassedy 1999, Gysels et al. 2005,
Ancel 2006, Brunero et al. 2010).

Research limits and future goals
With regard to our results, and taking into consideration
that the sample at the end of the study was ‘relatively’
small, a bigger sample would have highlighted the differ-
ences in empathy between the two study groups and/or
within each group as well as considering to the age factor.
Hence, a broadening of future investigation would be
fruitful.

We might also consider whether those who dropped out of
the study (but not the training course) would have affected
the results concerning the efficacy of the training course
positively.

The experimental nature of the study and its length
impeded control of all the variables that might have
influenced the tendency of empathy, such as personality,
interpersonal approach, cultural background, the degree of
professional competence acquired during the 3-year training
course and other personal experiences during this period.
Moreover, the clinical context in which the student is
‘protected’ from difficult relationships by the nurse supervisor
may have limited students in their attempt to face these
situations in the first person.

Our study leads to further research pathways regarding
the empathy level follow-up maintained or developed by
trainees. For instance, the addition of a T4 would enable us
to verify the modulation of empathy over time. Besides
taking into consideration empathy in the trainees, measure-
ments must include information about what patients per-
ceive, because they are the best judges in terms of evaluating
the degree of empathy they receive. The patient’s opinion
may well further clarify the concept of empathy within
caring: by giving the patient a voice both the patient and the
nurse benefit.

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Contributions
Study design: LC, RS, AMM; data collection and analysis:
LC, RS, OM, AMM and manuscript preparation: LC, RS,
AMM.

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