

## Some effects of management-training on the personality of head-nurses

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Socio-economic conditions of health care are increasingly determining training courses organized for professionals in health and nursing. This article deals with the question of change of personality traits occurring during an university course for leading staff in the health system, the subjects of which are based on modern training concepts.

Some results of a longitudinal study with measurements by means of standardized tests at the beginning, in the middle and at the end of a four semester-course are reported: They show positive change of their manager-qualities, i.e. increasing subjective autonomy and increasing values in dimensions like "Control-Attributions" and "Social Effectiveness". In the end psychological investigations in the field of nursing care and care management are suggested.

The Austrian health system is characterized by massive changes. International standards have to be adapted; among other things, hospitalization-periods must be shortened and the number of beds in hospitals has to be reduced. Nevertheless, due to socio-economic conditions (e.g. an aging society and patients expecting higher standards) the number of hospitalizations is being increased. That means that, at least in hospitals, a maximum of diagnostic and therapeutic service as well as an effective improvement in some fields of medical treatment and nursing care are required. This effort leads to an increase in staff employment (Köck 1996) and demands new guidelines for nursing care. The latter hold that whole person oriented nursing is important. A drastical growth of specialized literature supports these new thoughts, and an orientation towards a "scientification" of nursing care is taking place. All this has big influences on daily work of nurses in hospitals; they are challenged by accelerated sequences as well as higher accuracy of operations and by the need for improved co-operation with patients, doctors and colleagues. In short, nurses increasingly need to acquire top qualifications regarding their interpersonal skills at work such as communicating, self-presentation and leadership. In addition, they are legally committed to evaluate all qualitative aspects of nursing.

As a consequence, these emerging conditions of the health system begin to influence the education of nurses,

especially those nurses who are in leading positions. In order to qualify the leading staff for these challenges university courses are expected to teach and update the relevant skills of head nurses. One example is the University Course for Leading Staff in Health-Systems (UCLS) held at the University of Klagenfurt. The curriculum of the UCLS has 50 subjects in three tracks („Psychology and Social Sciences", "Research in Nursing and Health Sciences", "Professional Updating in Nursing and other Health Occupations"). This course includes 1050 lessons and lasts four semesters. Its didactics is oriented towards modern training concepts: Learning by Doing, Problem Oriented Learning and Permanent Feedback about Transfer. In other words, the students are expected to apply the competences acquired in the UCLS to their daily work and are supervised in this task.

One question of the evaluation of the UCLS is how the management competence of these students is improving. After all, about one third of the UCLS's 1050 lessons is well-defined intensive training of interpersonal skills at work and another - more theoretical third - is related to these skills indirectly. However, apart from the problem whether the management competence will hopefully be improved, another effect of the UCLS on these students comes into question; namely, a possible change in the personality of nurses, a topic that no psychological studies up to this day have dealt with. The problem appears to be as follows: On one hand we have the estimation that the correlation between personality and qualities of leading competence is rather weak (cf. Weinert, 1989); on the other hand, the question of how personal management qualities link to personal qualities gets a new perspective when, in the case

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of head-nurses, one considers the great deal of empathic and emotional competence needed in most duties in nursing care and nursing management. Because in the case of nurses despite the scepticism mentioned above the matter of relations between personality and leading competence may have a special accent.

In order to follow this line of thought one has to know the educational conditions which usually shape the individual habits and motivations of the average nurse in Austria. She (only 1 out of 30 nurses is male!) is subject to a very strict and broad curriculum (which includes permanent practical work in hospitals and stresses the ideal of responsibility and altruism) in the nursing school where, on average, she is aged between 16 and 20 years. Alas, despite the high standard of her education she is denied the acknowledgement she feels she has earned - that would be the final examination of a „Matura“ (i.e. A-level school leaving examination). Consequently, even if she continues her studies and gets through advanced training and becomes head nurse etc. in her perspective, she never reaches status and prestige comparable with kindergartener or a social worker. No wonder that the average nurse in Austria, despite her readiness for action, communication, performance and conscientiousness, has considerable neurotic tendencies and shows feelings of unprotectedness: maybe, inadequate social representations have hindered nurses to develop a justifiable self-confidence to fight for political support of social advancement (Janig & Suessenbacher, in press). In contrast to these circumstances the UCLS not only offers a solid practical as well as theoretical training of needed skills but also bestows - this is of utmost importance here - an academic professional title on the students: they graduate as Academically Accredited Health Managers.

## METHOD

In a longitudinal study with three points of measurement a standardized test battery was used to investigate if and how changes in management competence and personality traits have taken place during the four semesters of the UCLS. The class which was subject to our investigation was 24 female students at the beginning, 23 of which did all 4 semesters. These 23 students - nearly all of them nurses in Austrian hospitals in executive positions (15 ward sisters in sanatoriums, in casualty wards, in children internal medical and surgical wards; 2 head nurses; 2 medical assistants; 2 hospital-kindergarten head teachers; 2 nurses aspiring their promotion), aged between 28 and 45 years - have been tested at the beginning, in the middle and at the end of the course.

Amongst other tests not reported here the students were tested with the Giessen Test (GT - Beckmann, Braehler & Richter, 1991) testing the dimensions of social resonance, dominance, control attributions, basic mood, openness and social effectiveness; the NEO-Five-Factors Inventory (NEO-FFI - Borkenau & Ostendorf, 1993) testing the dimensions of neuroticism, openness, agreeableness, conscientiousness and extroversion; and the Questionnaire of Competence and Control Belief (FKK - Krampen, 1991) testing the internal and external locus of control.

## RESULTS

The values of dimension 1 (“Social resonance”) and dimension 5 (“Openness”) of the GT do not change in the three points of measurement (see figure 1). Accordingly, the students estimation of being liked, respected and trusting superiors remain identical - though a little exceeding the mean value of the representative sample. In contrast, the positive self-estimation in “Social effectiveness” (dimension 6) becomes markedly stronger. However, in dimension 2 (“Dominance”), dimension 3 (“Control-attributions”) and dimension 4 (“Basic mood”) significant alterations happen: Whereas the students at the beginning of the UCLS describe themselves as being rather pliant, patient and avoiding confrontations they respond in accordance with the mean value of the representative sample in the middle of the course; at the end, their estimation even assimilates to the group profile of managers (Kasper, 1985; Lepold and Böhret, 1987). That means they experience themselves as ready to dominate and even to argue if necessary. At the same time the students describe themselves as being more and more self-controlled. At the beginning, their tendency of orderliness equals the one of managers but, at the end, even exceeds it. Regarding the basic mood of the students, at the end they describe themselves as being much less depressed and self-critical; their mean value on this dimension equals the group value of managers.

Analogously, the results of the NEO-FFI say: During the course the students become more agreeable (dimension 4); their benevolence, need for harmony and complaisance have increased. At the same time the students grow more realistic and in control of their needs (dimension 1;  $p=.02$ ). They describe themselves as more eager for knowledge, more creative and less dependent regarding their power of judgement (dimension 3;  $p=.00$ ); in any case, they believe they work harder and more conscientiously than before (dimension 5;  $p=.02$ ).

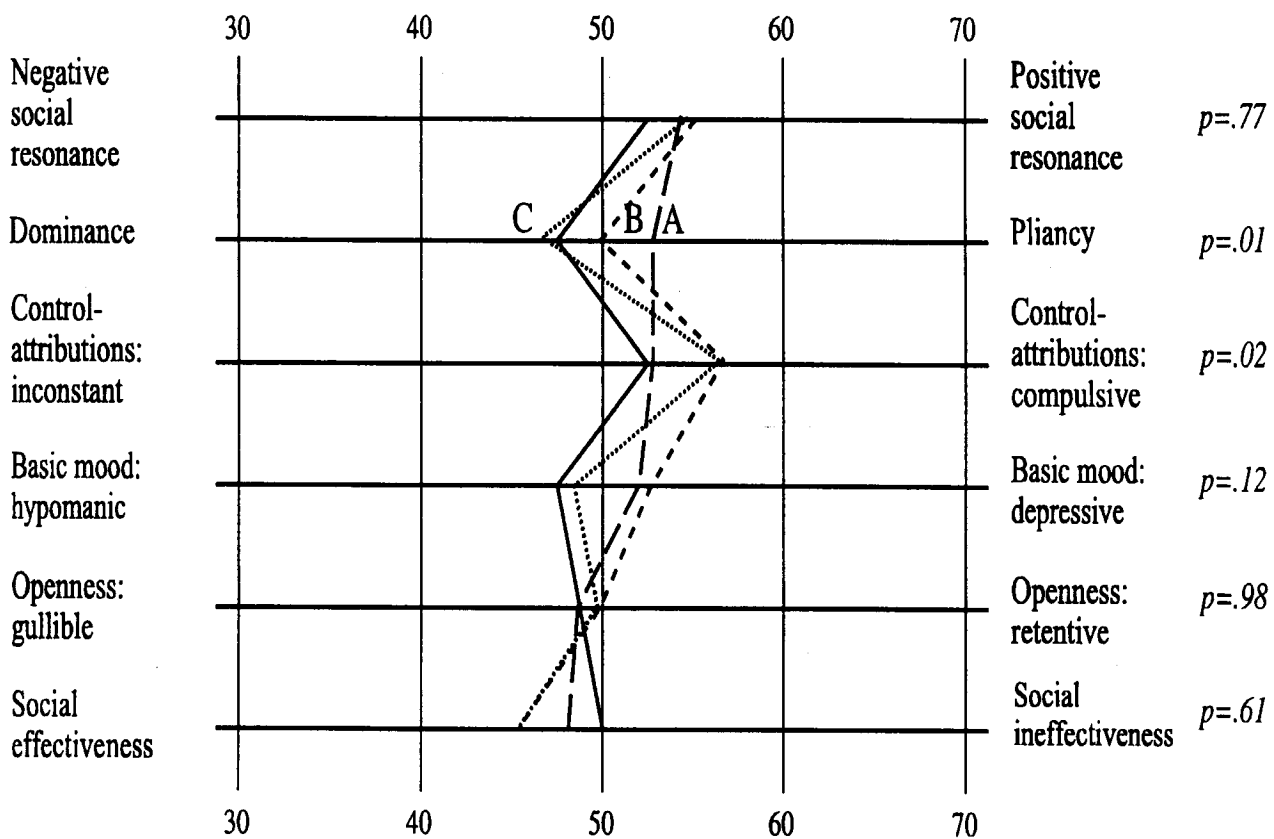


Figure 1. Changes of the students characteristics as measured by the Giessen-Test. Numbers are T-values. Full line-profile of managers; dotted lines - profiles of the students (A-first measurement; B-second measurement; C-third measurement). Attached on the right

Table 1  
Changes of the students characteristics as measured by the NEO-FFI.

	Pre-test	Post-test	t	p
T - values				
Neuroticism	45,5	42,6	-2,47	.02
Extroversion	51,8	51,6	-0,16	.87
Openness for experience	45,4	50,2	3,49	.00
Agreeableness	46,9	44,3	-1,9	.07
Conscientiousness	52,5	55,2	2,49	.02

The outcome of the FKK also confirms the results of the other tests: Regarding self-oriented behavior and decision making the dimensions of this test significantly confirm that the identified changes of the students have occurred. Here the estimated concept of being in control of

external factors - standing above average at the beginning of the UCLS - increases ("Generalized Control Belief";  $p=.03$ ), and the modest feeling of being determined by others decreases ("Social Externality";  $p=.00$ ).

## DISCUSSION

The far-reaching conformity of the students group profile in the GT with the group profile of managers at the end of the UCLS has two remarkable exceptions; namely, increasing values in the dimensions "Control-attributions" and "Social Effectiveness". Bearing in mind the results of NEO-FFI and FKK one can interpret the GT outcomes as pointing to a peculiarity of the nursing profession (created by personal motivation as well as educational conditions mentioned above); that is, although the head nurses during this management training develop such impressively strong personal manager qualities they never weaken those qualities which are characteristics of their profession - high degrees of responsibility and altruism. Of course these characteristics are absolutely; in fact, these characteristics not only don't change but even increase. The rather modest self estimation in the dimensions „Dominance“ and „Basic mood“ of the GT at the beginning, on the other hand, may be interpreted as characteristics which are caused by social representations obstructive to adequate development of self confidence.

In any case, the results of this investigation point at topics of psychological research within nursing science which may be of possible future interest: questions of personality, interaction, group dynamics etc. occurring in education and daily work of this specific type of managers.

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