ASSESSING OSTHEOPATHIC PHYSICIANS' PROFESSIONAL QUALITIES AND PROSPECTS FOR PROFESSIONAL TRAINING

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Basic notions

Professional abilities represent a combination (or a structure) of individual psychological qualities that are stable enough but can be altered by education. This combination, where lacking personal qualities are compensated with other ones, determines the efficiency of training and improvement in a given professional scope.

Professionally important qualities (PIQ) are a person's individual qualities that affect his/her performance within chosen activity. Depending on these qualities, different performance levels are possible, from complete unsuitability for the chosen profession to highest professional competence.

The psychogram of a profession is determined by the combination of PIQs and by their structure.

Interest of the study

✓ **Studying professional activity of osteopaths, as "non-structured" specialists possessing non-standard problem-solving approaches, can be of great scientific value.**

✓ **It is widely known that highly developed psychophysiological and psychological functions, representing professionally important qualities, determine high efficiency and speed of training, as well as high performance of a specialist within different professional domains.**

✓ **Being able to evaluate students' PIQs, we can provide better teaching and recommend the students to practice and improve their underdeveloped qualities, which can be very important for their future osteopathic activity.**

Purpose of the study

Elaborate criteria and algorithms of predicting osteopathic training efficiency basing on the assessment of students' professionally important qualities.

Research tasks:

✓ - discover professionally important **psychological and psychophysiological qualities** that are necessary for **efficient training and successful professional activity** of an osteopath;

✓ - elaborate **criteria and algorithms of making prospects about students' professional training** at the Institute of Osteopathic Medicine.
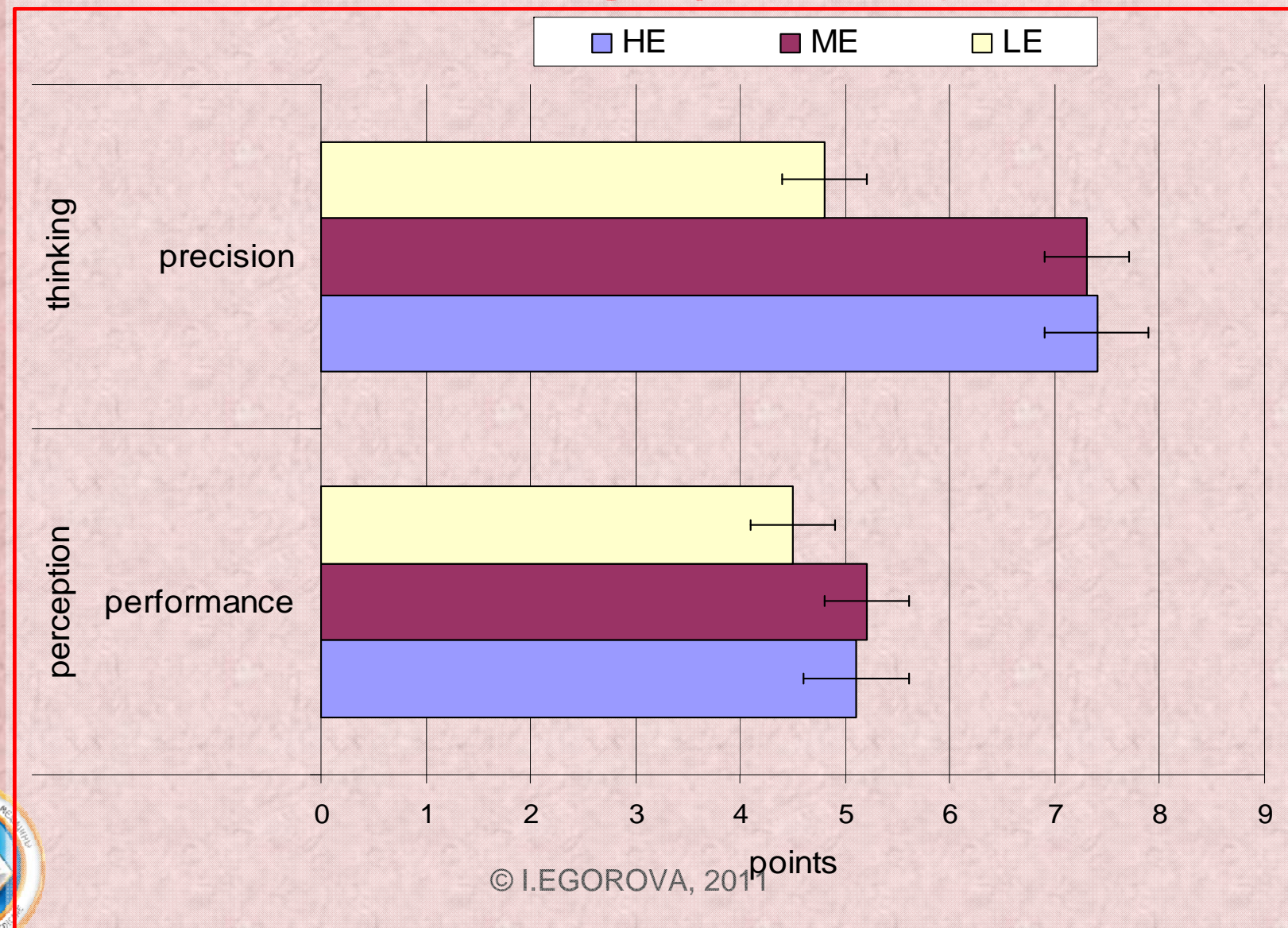
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Stages of the research

- **At the first stage,** expert assessments were used to discover 10 leading professionally important qualities (PIQ) of an osteopath and to rank them by relevance. We have calculated average expert grades, variation and concordance rates, establishing correlations between expert grades with correlation analysis.

- **The second stage** consisted in psychophysiological testing of the students.

- **The third stage** consisted in evaluation of PIQs. Basing on students' progress (theoretical knowledge, gaining practical skills) they were divided into three groups: the "high-efficient", the "mid-efficient" and the "low-efficient". Comparative evaluation of PIQs enabled us to forecast the efficiency of training within specified groups of students using common statistic tools.
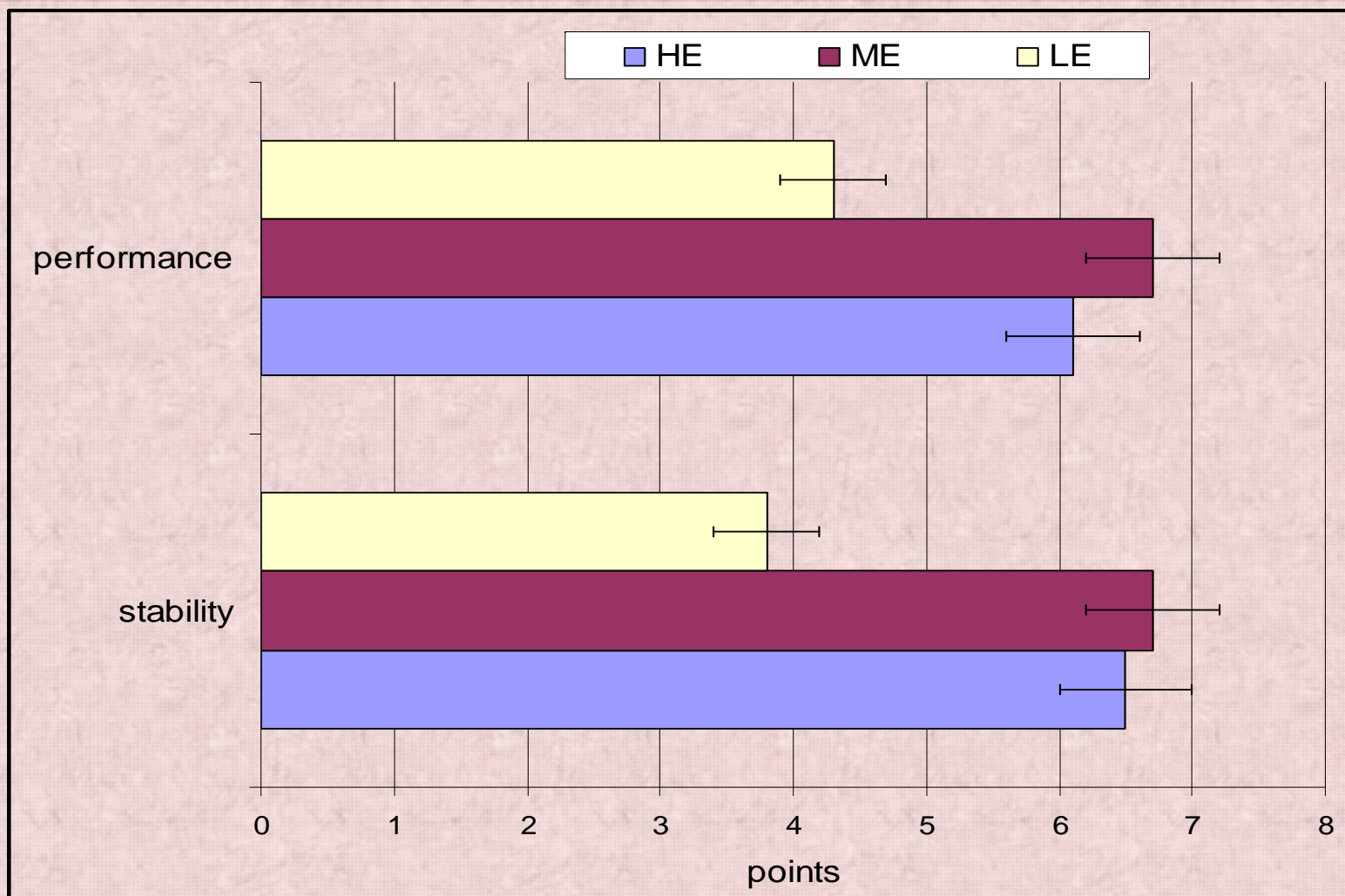
PIQ characteristics and evaluating methods

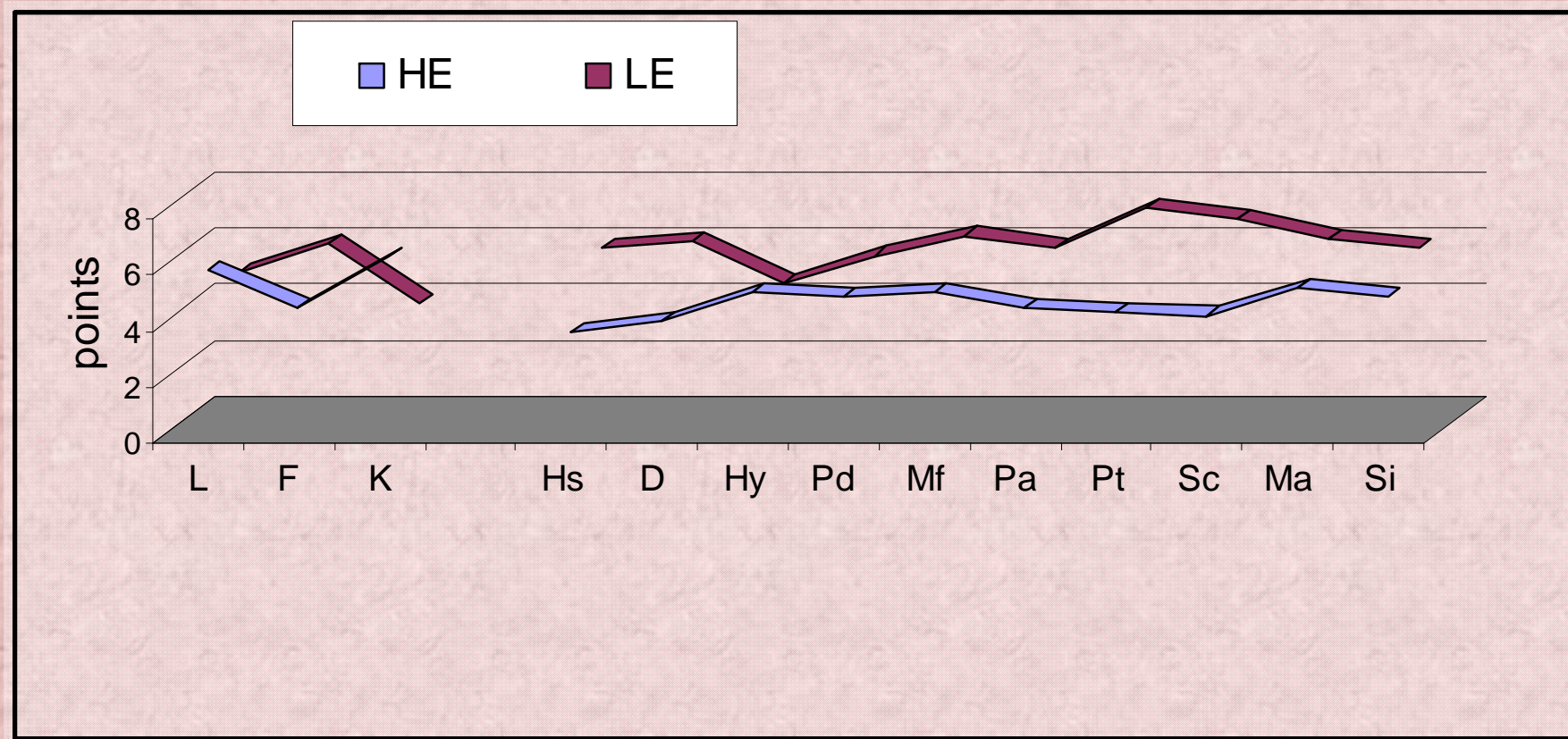| PIQ	Evaluating methods
Memory (motor memory: muscles and fingers)	Consecutive comparison
Thinking (mental imagery)	Spatial abilities
Representation (representation of figures, forms, processes and phenomena)	Spatial abilities
Psychomotor functions (coordination of simultaneous movements of arms and legs, - coordination of simultaneous arm movements, - coordination of finger movements)	Limb movement coordination (fine hand coordination)
Perception (spatial, visuospatial)	Spatiotemporal extrapolation
Attention (stability, concentration)	Correction test with Landolt rings
Personality (individual psychological qualities)	MMPI questionnaire
Motivation	Motivation profile

Comparative chart of visuospatial perception and mental imagery values (X±Sx)

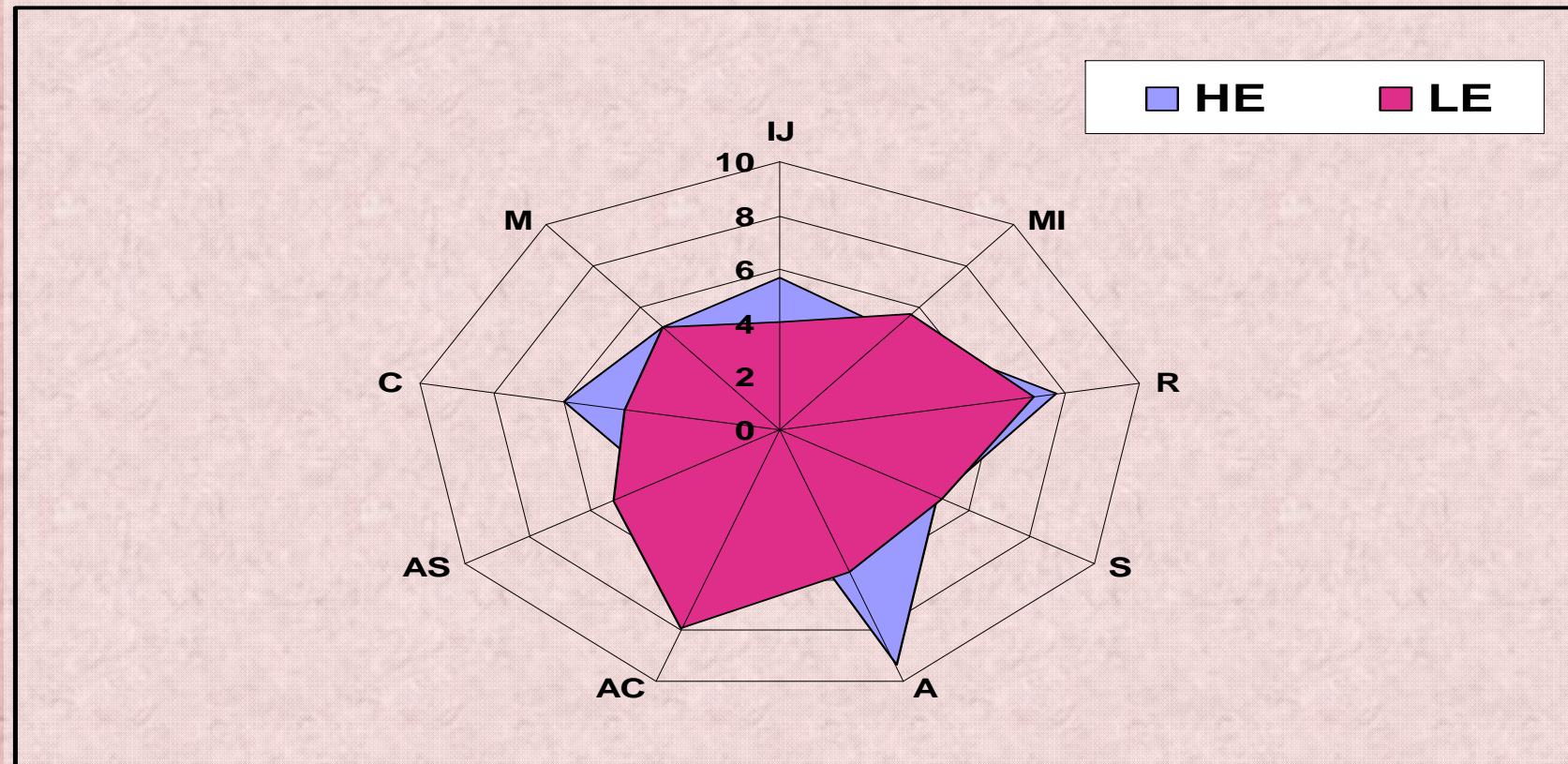# Comparative chart of muscle and finger memory values (X±Sx)

Legend: HE, ME, LE

Categories (y-axis): performance, stability

x-axis: points (0 to 8)

Comparative chart of individual psychological qualities according to MMPI test (X±Sx)

L – lie scale, **F** – reliability scale, **K** – correction scale,
Hs – overcontrol, D – pessimism, **Hy** – emotional instability,
Pd – impulsivity, **Mf** – masculinity/femininity, **Pa** –rigidity,
Pt – anxiety, Sc – egocentrism, **Ma** – optimism, **Si** – introversion

Comparative chart of motivation level according to "Motivation profile" test (X±Sx)

M – money, C – carreer, AS - attitude toward superiors, AC - attitude toward colleagues, MI - motivation intensity, A - acknowledgement, S - success, R - responsibility, IJ - interesting job

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Importance of the psychophisiological qualities in osteopaths' PIQ structure (results of the factorial analysis)

✓ **Psychomotor function (level of movement coordination, especially fine hand coordination) - 30%.**

✓ **Individual psychological qualities of the students, determining their performance at the osteopathic training - 17,8%.**

✓ **Mental imagery - 11,2%.**

✓ **Visuospatial perception - 7.3%.**

Conclusions

- **PIQs ensuring efficient osteopathic training were defined and listed for the first time.**

- **Analyzing correlations between the development of psychophysiological qualities and the index of training efficiency, we were able to validate and develop criteria and algorithms of making prospects about students' professional training.**

- **Assessing the accuracy of the calculation algorithm proves reliability of the results achieved through it: the precision of recognizing and classifying people with different efficiency prospects reached 90%.**

- **The results of our research allow us to formulate some qualification requirements for the osteopathic profession and to elaborate different training programs that help develop required qualities in one group of students and correct personal characteristics in the other one.**

Thanks for your attention!