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Identification of distinctive characteristics, principles, and practices of the osteopathic physician in the current health care system

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Abstract

OBJECTIVE: The osteopathic medical profession traditionally has distinct attributes. The purpose of this study is to identify current perceptions among osteopathic medical students, residents, and practicing physicians (teaching and nonteaching) to gauge the dynamics and perspectives of the distinctive characteristics, practices, and principles of the osteopathic medical profession.

METHODS: The study used qualitative and quantitative methods sequentially in two phases, respectively. Osteopathic medical students, residents, and practicing physicians were drawn from the Western, Rocky Mountain, and Ohio Valley geographic regions. The qualitative phase used a series of focus group discussions from which themes were derived that informed writing of questions for a pilot questionnaire administered and analyzed for the quantitative phase. Item analyses, factor analyses, and multivariate analysis of variance were used.

RESULTS: Focus groups showed that osteopathic distinctiveness is characterized chiefly by a holistic patient-centered approach, the use of alternative treatments to medications, training in osteopathic manipulation, and additional training in anatomy during medical school. A 38-question survey instrument was obtained. Factor analyses of this initial 38-question instrument yielded a 15-item three-factor solution that characterizes traditional attributes (excluding primary care emphasis), research as future direction, and perceived importance as constituents of osteopathic distinctiveness.

CONCLUSIONS: Osteopathic distinctiveness perceptions are evolving from exclusive emphasis on primary care to broader traditional norms because of probable generational shifts in the profession. These changing dynamics should be considered in curricula development and policy along the entire continuum of osteopathic medical education by leadership of the profession.
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Osteopathic distinctiveness is historically defined by both principles and practices. In recent years, there are increasing concerns that the distinctiveness of osteopathy is eroding. To address these concerns, determination of perceptions and expectations regarding the distinctive osteopathic identity and clinical demonstrability are needed. The aim of this study was to identify distinct characteristics, principles, and practices of the osteopathic physician as perceived by osteopathic students, residents, faculty, and practicing physicians.

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The four basic tenets of osteopathy are (1) The body is a unit; (2) the body is capable of self-regulation, self-healing, and health maintenance; (3) structure and function are reciprocally interrelated; and (4) rational treatment is based on an understanding of the basic principles of body unity, self-regulation, and the interrelationship of structure and function.[1] These tenets establish criteria by which the osteopathic physician practices medicine holistically. Therefore, the osteopathic physician often enters a primary care field of practice.[2,3] The osteopathic practice of using a structural examination and manipulative therapies defines the osteopathic physicians as distinct from their allopathic counterparts.[4]

Osteopathic training was also distinct in its first century because medical school training, postgraduate training, and continuing medical education took place almost exclusively in osteopathic arenas. The training focused on reinforcing the basic tenets of osteopathy and training in the structural examination and manipulative therapy.

Differences between osteopathic and allopathic medicine have gradually diminished over the past century.[5-7] Although osteopathy was developed as a new approach to medical problems that were not adequately addressed in the 1870s, much of the ensuing century was spent trying to establish osteopathic physicians as equal to their allopathic colleagues. In establishing this equality, osteopathic physicians adopted a number of practices and characteristics of their allopathic colleagues. The effort to establish equal licensure status has tended to result in the training of osteopathic physicians in concepts and body of medical knowledge that are identical to those of allopathic physicians. At the same time, allopathic medicine began to recognize the benefits of osteopathic philosophy, specifically the holistic approach to diagnosis and treatment espoused by osteopathy. This latter development aligned allopathic medicine closer to osteopathic medicine. As a result, osteopathic physicians are no longer, as was the case historically, considered alternative or complementary but rather more mainstream like their allopathic counterparts.

The second development that has eroded the distinctiveness of osteopathy is the declining use of osteopathic manipulations. A survey of osteopathic physicians in 1998 revealed that more than 50% of osteopathic physicians used manipulation in less than 5% of their patients.[8] About 30% use manipulations in 5% to 25% of patients, with family physicians using osteopathic manipulative treatment (OMT) more, 50% compared with specialists (17%). The decline in the use of osteopathic manipulation and palpatory diagnosis does not necessarily suggest distrust in osteopathic principles and practice but may be a reflection of the emergence of greater options in diagnosis and treatment.

The third factor that has undermined the traditional distinctiveness of osteopathy is the growth of specialty care practitioners. The predominant choice of primary care practice by osteopathic physicians was considered a distinct aspect of osteopathic training. The explosion in diagnostic testing, medical therapeutics, and procedural medicine in the past three decades has led increasing numbers of osteopathic physicians to choose specialty professions. This trend can be seen in the past few years, where fill rates for osteopathic residency positions in family medicine, internal medicine, and pediatrics fell from 45% in 2003 to 34% in 2005.[9]

As a result, there are increasing concerns that the distinctiveness of osteopathy is blurring. Although some osteopathic leaders are concerned about this blurring, it has provided an opportunity for allopathic physicians to call for a merger of the two medical professions into one.[10] In his 1999 *New England Journal of Medicine* editorial "The Paradox of Osteopathy," Howell argues that the decline in the use of manipulative therapies by osteopathic physicians and the integration of osteopathic physicians into mainstream medicine no longer made it necessary to maintain two distinct medical disciplines.[10] In fact, it is proposed that, with health care reform redefining how physicians practice medicine, there is no better time for allopathic and osteopathic physicians to identify common issues and work together to foster a unified front toward efficient and effective health care delivery.[11] Osteopathic leaders argue that the osteopathic tenets may help garner support among osteopathic professionals for a distinctive medical track, but how these principles can represent both a distinct yet collaborative perspective is challenging. Furthermore, if osteopathic education eliminated training in osteopathic philosophies, would these approaches be championed by and instituted within a unified physician education?

These changes in osteopathic distinctiveness do not necessarily mean that osteopathy is obsolete. On the contrary, these findings indicate osteopathic medicine's influence on allopathic medicine and a willingness to adapt to changes in patient needs and health care developments. These changes also suggest that a reassessment of how osteopathic principles and practices may serve the health care community and patients in the decades ahead is needed. This research represents the beginning efforts to kickstart a discourse toward that reassessment.

Previous studies determined attitudes toward osteopathic principles and the distinctiveness of the osteopathic profession.[8,12] These studies focused on perception of OMT or gathered survey items from osteopathic experts or specialists only. This current study, as a departure from the previous ones, involved a greater representation of the osteopathic field beyond osteopathic manipulative medicine experts only. The study determined broader perceptions and perspectives with the consequence of deriving constructs of osteopathic distinctiveness within the contemporary health care delivery context.

Methods

Phase 1—Qualitative study

This phase used a series of focus group discussions involving osteopathic medical students, residents (including fellows and interns), and practicing physicians (teaching and nonteaching physicians) to identify through their narratives what they consider the distinctive attributes of the

Table 1 PowerPoint slides of questions/discussion points used in the focus groups

Slide number	Questions/discussion points
1	Osteopathic principles ● The body is a unit — The body is capable of self-regulation, self-healing, and health maintenance ● Structure and function are reciprocally interrelated — Rational treatment is based upon an understanding of the basic principles of body unity, self-regulation, and the interrelationship of structure and function
2	What do YOU think makes the practice of osteopathic medicine unique? Consider "traditional" and "current" practices Traditional "unique" qualities ● Manipulative therapy ● Trend towards entering primary care field ● The osteopathic examination ● Treatment of musculoskeletal problems ● Osteopathic principles or philosophy ● Osteopathic education
3	What do YOU think will make osteopathic medicine unique in the next decade? ● Traditional qualities ● New qualities
4	Do you feel osteopathic uniqueness is important? ● To you ● To the profession ● To patients
5	What are the negative aspects of promoting osteopathic uniqueness? ● To you ● To the profession ● To patients

osteopathic physician in the current health care system. The focus groups were conducted with self-selected participants from the Western States, Rocky Mountain, and Ohio Valley regions. In all, 52 participants were involved in the focus groups across the regions and by each participant subcategory.

The focus group interviews were facilitated by the use of open-ended questions and discussion points (Table 1 for sample questions) presented through PowerPoint slides. Notes taken by the investigator moderating the focus group were summarized for later analysis. Voice recordings of the focus groups were taken at each session, and then participant responses transcribed and coded for generation of themes.

Although numerous responses were recorded along with considerable focus group discussion and dialogue, the major themes regarding osteopathic distinctiveness were summarized. In the transcription and summary of responses, an attempt was made to condense responses that were essentially the same, although expressed in different words. Responses of students, residents, and practicing physicians did not substantially differ. This was true regardless of whether focus groups were composed of only one category (ie, students alone) or whether they were composed of a mix of trainees and practicing physicians. Table 2 provides a summarized sample of themes derived from the focus group responses regarding characteristics of osteopathic distinctiveness.

While expressing their views about what characterizes osteopathic distinctiveness, it was evident that respondents from all participant categories equally expressed reservations that overemphasizing distinctiveness could inhibit ideal collegial working relationships between MDs and DOs. The concerns expressed about osteopathic distinctiveness to a large extent followed those of previous studies cited. Table 2 also contains a summary of some of the major themes expressing concerns about maintaining osteopathic distinctiveness.

Phase 2—Quantitative study

Phase two of this study involved developing a preliminary survey instrument based on the themes derived from the phase one analyses, with the ultimate goal of deriving what constitutes the constructs of osteopathic distinctiveness in a contemporary context. The preliminary survey instrument was administered to a larger participant group across the regions previously mentioned in phase one. Again, the participants were osteopathic medical students, residents, and practicing physicians.

Table 2 Selected themes from the focus groups about characteristics of osteopathic distinctiveness and its concerns

A. Views on constituents of osteopathic distinctiveness characteristics ● Holistic approach ● Alternative treatments considered in addition to medications ● Patient-centered ● Healing partnership with patients ● Medical school training in manipulation ● Osteopathic manipulation—training, but not always continued in practice ● Research engagement
B. Concerns about osteopathic distinctiveness ● Need for two board examination and certification processes ● Do not want distinctiveness characteristics to cause division between MD and DO physicians ● Do not want distinct characteristics (ie, alternative treatments) to discourage research ● Characteristics like patient-centered and holistic are not exclusively osteopathic

The survey instrument consisting of 38 items was piloted across osteopathic institutions in the delineated regions of the US. It contained demographic questions of participants and linked response patterns to subgroups as desired. The initial questionnaire is presented in the its entirety in the Appendix.

Statistical analyses

The statistical methods used included item reliability analysis, factor analysis, and multivariate analysis of variance (MANOVA). Items analyses were conducted to determine the internal consistency reliability of the items as measured by Cronbach's alpha. Factor analysis was used to explore the dimensional structure of the items, with the goal of obtaining the constructs (factors) of osteopathic distinctiveness. The mean summated scores of each of the factors together with an overall mean summated score were computed. Participant subcategory comparisons with respect to each of the mean summated factor scores were done using MANOVA. Statistical significance was set at $p \leq 0.05$.

Results

The focus group consisted of 52 participants across the regions and by each of the participant subgroups. The survey was administered in the osteopathic institutions across the indicated regions. The total number of responses was 244; it was not feasible to obtain a response rate because full knowledge of the target population size was not accessible at the time of survey administration.

The sample consisted mainly of 20- to 30-year-old respondents, an almost even split of percentage between males and females, 77.7% students and 15.7% residents; the majority of participants indicated family medicine and emergency medicine as a specialty (Table 3).

Table 3 General demographic profile and current academic characteristics of survey participants

Current participant demographic/characteristic	n	Valid percent*
Age (y)		
20-30	182	74.6
31-40	42	17.3
41-50	13	5.3
>50	7	2.8
Sex		
Female	103	42.6
Male	139	57.4
Status		
Student	189	77.7
Residents†	38	15.7
Practicing physician	16	6.6
Specialty (for residents)		
Family medicine	32	12.9
EM	13	5.2
Internal medicine	8	3.2
Surgery	6	2.4
Family medicine/NMM	4	1.6
Orthopedics	4	1.6
Neurosurgery/neurology	4	1.6
OB/GYN	3	1.2
ORL–HNS	3	1.2
Other‡	11	4.4

NMM = Neuromusculoskeletal Medicine; ORL-HNS = Otorhinolaryngology-Head & Neck Surgery; IM = Internal Medicine.

*May not total 100% because multiple answers were required. Valid percent refers to frequencies excluding missing values.

†Includes Interns, Residents, and Fellows.

‡Consists of Anesthesiology (1), Family Medicine/Psych (1), Ophthalmology (1), Dermatology (1), Psychiatry (1), Cell Biology (1), Emergency Medicine/IM (2), and Cardio/Pulmonary (2).

The internal consistency reliability[13,14] (measured by Cronbach's alpha) of the original 38 items was 0.899. Items with corrected item-to-total correlation <0.3 at the initial item analysis stage were deleted and excluded from subsequent stages or runs of the analyses. A second run, without the excluded items, yielded 30 items and a reliability of 0.918. A principal factor analysis with *varimax* rotation was conducted to determine the dimensional structure of these items as a measure of osteopathic distinctiveness construct. Traditional criteria for factor retention such as the Kaiser criterion of an eigenvalue >1, scree plot, residual assessment, and total variance explained >70% suggested the retention of six to eight components. However, a robust method of parallel analysis from a Monte Carlo simulation yielded a five-component solution.

Retaining five components as suggested by the parallel analysis would yield 18 items out of the 21 shown in Table 4. Analyzing the resulting 18 items further, a reliability of 0.878 was obtained. However, one item of component 1 was a drag on internal consistency, resulting in reduced reliability. Hence, deleting this item improved the reliability of the 17 items to 0.905. Nonetheless, these 17 items did not yield an optimal structure in terms of number of items per factor and unique item loading per factor (univocality).

Further factor analyses were conducted on the 17 items using both principal components and maximum likelihood extractions to provide comparative structures underlying the data. Both extraction methods yielded similar structures in terms of item loadings. This process resulted in the elimination of two other items. In these intermediary stages, items that loaded on more than one factor (multivocal) were dropped. Factors or components that had fewer than three items loaded on them were also excluded. Hence, 15 items (Table 5) remained as constituting the final osteopathic distinctiveness construct. The reliability of the construct, defined by a three-component/factor structure, consisting of these 15 items, was 0.908. The three resulting component/factors of osteopathic distinctiveness could be defined as (1) traditional osteopathic characteristics, (2) research to support osteopathic practice, and (3) perceived importance of

Table 4 Initial factor/component structure of items defining osteopathic distinctiveness and the associated loadings

Factor/component*	Items†	Loadings‡
1	a. Linking of structure and function	0.583
	b. Facilitating self-healing	0.532
	c. OMT "less invasive" treatment option for some patients	0.652
	d. Ability to offer additional treatment	0.457
	e. Patient centeredness	0.652
	f. Osteopathic distinctiveness is important to me	0.716
	g. Osteopathic distinctiveness is important to the osteopathic profession	0.858
	h. Osteopathic distinctiveness is important to my patients	0.778
	i. Will give others the impression osteopathic physicians are inferior	−0.522
2	a. Osteopathic research	0.725
	b. Teaching OMT to allopathic physicians	0.709
	c. Stress healing is a "partnership"	0.518
	d. Increase in research engagement	0.840
	e. Use of research methods as a scientific means to improving patient care and safety	0.861
3	a. Osteopathic manipulative therapy training	0.786/0.590‡
	b. Holistic emphasis	0.655/0.542‡
4	a. Emphasis on anatomy	0.872/0.811‡
5	a. Alternative to allopathic training	0.778/0.847‡
6	a. "Friendly" learning environment in osteopathic medical school	0.717/0.663‡
7	a. Training in osteopathic medical institutions	0.845/0.794‡
8	a. Primary care emphasis	0.543/0.786‡

*These were initial factor solutions obtained, but a five-component structure was suggested through a parallel analysis. For that, the total number of distinct items for a final instrument would be at most 18. Only components or factors with at least three items would be retained in subsequent analyses.

†Items included here have loadings >0.4.

‡These items loaded together on this component, although they were originally designed to measure unique constructs. The manner in which they cleaved together in the analysis provided a construct validity of the instrument. However, they were deleted from subsequent analyses because they loaded on more than one factor (ie, they were multivocal).

osteopathy. Reliabilities for each of these three factor/components were, respectively, 0.860. 859, and 0.879.

To determine whether there were any differences in the perceptions of the subcategories, a MANOVA was used. The MANOVA did not show statistically significant differences ($p = 0.444$) among the groups/students classified into preclinical (first and second years) and clinical (third and fourth years) groups, residents group, and a practicing physicians group (consisting of faculty and nonteaching physicians)—with respect to each of the three subconstructs of osteopathic distinctiveness and an overall measure of perception of distinctiveness. Table 6 shows the means and standard deviations of the three subconstructs mean scores and the overall mean score for each of the participant categories. The mean scores <3 indicated favorable or positive perspectives toward the osteopathic distinctiveness construct, whereas those >3 indicated otherwise. For all three subconstructs including the overall measure, there was no mean value >3. This suggested that all respondents generally were positively disposed toward osteopathic distinctiveness.

All the groups were unanimous in their views on osteopathic distinctiveness in terms of traditional characteristics and vigorous research endeavors as necessary for distinctiveness now and in the future, and that osteopathic distinctiveness is inherently important to stakeholders including the physician, the patient, and even the profession.

Discussion

Osteopathic distinctiveness, as seen by osteopathic medical students, residents, and practicing physicians is characterized by a holistic, patient-centered approach, the use of alternative treatments to medications, training in osteopathic manipulation, and additional training in anatomy during medical school. These distinctive characteristics are considered beneficial by osteopathic student and resident trainees and practicing physicians alike. However, they expressed concerns that, for example, current separate board examinations and certification processes are a result of the longing to maintain distinctiveness. In this regard, they opined that the insistence on distinctiveness has the potential to hinder working relationships between DO and MD physicians, with the possibility of discouraging collaborative medical research. Indeed, three main constructs emerged as defining contemporary osteopathic distinctiveness, namely[1] traditional osteopathic characteristics,[2] research to support osteopathic practice, and (3) perceived importance of osteopathy. Participants still perceived distinctiveness in terms of some traditional characteristics of the profession. They were also of the conviction that research engagement is one way of pursuing distinctiveness. Last but not the least, participants were of the view that distinctiveness derives from the importance of the osteo-

Table 5 Final 15 items from a three factor/component structure and associated reliabilities that characterize current perceptions of osteopathic distinctiveness

*Factor/component	Items†	Reliability‡
1	a. Linking of structure and function	0.860
	b. Facilitating self-healing	
	c. OMT "less invasive" treatment option for some patients	
	d. Ability to offer additional treatment	
	e. Patient centeredness	
	f. Osteopathic manipulative therapy training	
	g. Holistic emphasis	
	h. Stress healing is a "partnership"	
2	a. Osteopathic research	0.859
	b. Teaching OMT to allopathic physicians	
	c. Increase in research engagement	
	d. Use of research methods as a scientific means to improving patient care and safety	
3	a. Osteopathic distinctiveness is important to me	0.879
	b. Osteopathic distinctiveness is important to the osteopathic profession	
	c. Osteopathic distinctiveness is important to my patients	

⁎The reliability of the items combined (ie, the entire instrument) is 0.908.

*Three factor/component structures were derived through factor analysis with principal component and maximum likelihood extractions. These factors were deemed to define latent constructs, namely (1) traditional osteopathic characteristics, (2) research to support osteopathic practice, and (3) perceived importance of osteopathy.

†These 15 items satisfy all the conditions for loading into the factors described.

pathic profession to stakeholders—patients, practitioners, and the profession itself. All categories of participants were unanimous in their perception of distinctiveness—defined by the three factors—as revealed by the insignificance of the MANOVA results.

Maintaining osteopathic distinctiveness is clearly important to the majority of respondents. Factors such as facilitation of self-healing, the use of less invasive and alternative treatment options, a holistic approach, and patient-centered and "partnership" health care represented consistent themes. Research into osteopathic efficacy also emerged as important to survey participants. This finding is indeed consistent with the view of many osteopathic physicians about the need to maintain distinctiveness even in the current health care delivery context of increasing parallelism and convergence of identity in practice with allopathic medicine.[15-20]

Table 6 Means and standard deviations of the three constructs and overall distinctiveness perception by respondent category

Construct	Mean (M)	Standard deviation (SD)
Traditional osteopathic characteristics		
Medical students (years 1 and 2)	1.78	0.535
Medical students (years 3 and 4)	1.91	0.820
Residents	1.73	0.479
Practicing physicians	1.94	0.622
Research to support osteopathic practice		
Medical students (years 1 and 2)	2.37	0.806
Medical students (years 3 and 4)	2.43	1.129
Residents	2.41	0.783
Practicing physicians	2.56	0.878
Perceived importance of osteopathy		
Medical students (years 1 and 2)	2.32	1.025
Medical students (years 3 and 4)	2.43	1.021
Residents	2.08	1.082
Practicing physicians	2.16	0.825
Overall perspectives (all 3 subconstructs together)		
Medical students (years 1 and 2)	1.91	0.714
Medical students (years 3 and 4)	2.06	0.872
Residents	1.98	0.481
Practicing physicians	2.13	0.615

Although this survey reveals consistent trends, the investigators found surprising results. For instance, primary care has traditionally been thought of as a hallmark of osteopathic medicine, yet the final items that underscored traditional construct of osteopathic distinctiveness did not load together with primary care emphasis. This might indicate that primary care emphasis may no longer be perceived as a traditional distinguishing characteristic of an osteopathic physician. Moreover, because a higher proportion of students responded to the survey than residents and practicing physicians, this may be a reflection of a shifting generational perspective about primary care being a traditional attribute of osteopathic distinctiveness. Indeed, this is contrary to currently held assumptions in the field regarding primary care being the critical defining characteristic of the osteopathic profession. Thus, this finding needs to be investigated further.

It is worth mentioning that 93.4% of the survey respondents were mainly students and some residents. These respondents were in the age range of 20 to 30 years. A central point of the study was to assess what this young and upcoming group regarded as distinctive qualities of the profession they are pursuing and situate that perception within the context of the commonly held beliefs and historical thought of osteopathic

distinctiveness. Interestingly, their responses suggested some departures from the existing historical paradigm of what distinguishes the osteopathic medical profession from the allopathic profession. Information of this kind is important for curricula decisions. Deans of colleges of osteopathic medicine can use this information in their design, implementation, and presentation of osteopathic principles and practices/osteopathic manipulative medicine (OPP/OMM) components of the curricula. It can also be used at the recruitment stage of students to screen and ensure that incoming students indeed have osteopathy at heart and are not only using it as a "back door" to the medical profession.[16]

Indeed, osteopathic distinctiveness is an evolving concept in the same manner as the profession itself has evolved through the years. The osteopathic medical profession had to work through frustrations from discrimination,[21,22] obstacles and opposition,[22] and even outright rejection as part of the mainstream medical profession[23,24] to reach its present state of acceptance.[25] To the extent that all respondents—students, residents, and practicing physicians—demonstrated passion about osteopathic distinctiveness, every effort should be made at policy level to devise deliberate strategies to help achieve that objective. As mentioned previously, curricula decisions that imbue osteopathic principles and practices in trainees across the entire hierarchy of osteopathic medical education may be necessary. Policy around issues of osteopathic medical education and residency should be crafted with maintenance of osteopathic identity and distinctiveness in mind. Future distinctiveness of osteopathic medicine may first include parity in all aspects of training and practice as the allopathic counterparts, but beyond that, something uniquely evidence-based that can be integrated into the current health care delivery system to increase care quality, lower costs, and ensure patient safety.

The main limitations of this study were that the respondents were composed mostly of students and the study covered limited geographic locations. Because respondents were self-selecting, they might have responded in socially desirable ways. As a future plan, the survey will be readministered to a larger and varied population, for example, across all colleges of osteopathic medicine and residency programs nationwide. This round of the survey will focus on using other forms of validity to validate the instrument besides the construct validity from the factor analysis technique. After the analysis from the survey at this stage, the final instrument can be given back to the colleges as an assessment tool of osteopathic medical trainees and faculty attitudes regarding osteopathic distinctiveness. It is expected that using a psychometrically sound instrument can provide insights to enhance curriculum decisions that deliberately help to preserve some osteopathic distinctiveness in these times of increasing congruence and overlapping identity of practice of osteopathic trainees and physicians with their allopathic counterparts. Osteopathic leadership could use this information to guide osteopathic medical educational policy to orient and focus trainees in pathways they considered as defining, nurturing, promoting, and sustaining osteopathic distinctiveness.

Conclusions

Osteopathic distinctiveness perceptions are evolving from exclusive emphasis on primary care to broader traditional norms because of probable generational shifts in the profession. These changing dynamics should be considered in curricula development and policy along the entire continuum of osteopathic medical education by leadership of the profession.

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Appendix: Initial survey instrument administered

1. What is your PRIMARY status (DO, MD, PhD, MS, MPH)
2. Current age group
3. Gender
4. Medical specialty
5. Professional Designation (Check all that apply)
6. Type of residency
7. Current teaching status (check all that apply)
    - Basic science instructor (MS1, MS2)
    - Medical student clinical instructor (MS3, MS4)
    - Resident Instructor
    - Fellowship instructor
    - Other (please specify)
8. Please evaluate the following statements based on YOUR knowledge of what has traditionally defined Osteopathic distinctiveness. SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree
    - Training in osteopathic institutions
    - Primary care emphasis
    - Osteopathic manipulative therapy training
    - Holistic emphasis
    - Alternative to allopathic training
    - Emphasis on anatomy
    - Ability to offer additional treatment
    - Minimal emphasis on research
    - "Friendly" learning environment in osteopathic medical school
    - Linking of structure and function
    - Facilitating self-healing
    - Other (please specify)
9. Please evaluate the following statements based on YOUR opinion of what WILL define osteopathic medicine's distinctiveness in the future. SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree
    - Osteopathic distinctive qualities in the future
    - Training in osteopathic institutions
    - Primary care emphasis
    - Osteopathic manipulative therapy training
    - Holistic emphasis
    - Alternative to allopathic training
    - Emphasis on anatomy
    - Ability to offer additional treatment
    - Osteopathic research
    - "Friendly" learning environment in osteopathic medical school
    - Linking of structure and function
    - Facilitating self-healing
    - Alternative to medications
    - OMT "less invasive" treatment option for some patients
    - Teaching OMT to allopathic physicians
    - Patient-centeredness
    - Stress healing is a "partnership"
    - Increase in research engagement
    - Use of research methods as a scientific means to improving patient care and safety
    - Other (please specify)
10. Please evaluate the following statements based on YOUR opinion of the importance of Osteopathic distinctiveness. SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree
    - Osteopathic distinctiveness is import to me
    - Osteopathic distinctiveness is important to the OSTEOPATHIC PROFESSION
    - Osteopathic distinctiveness is important to MY patients
    - Comments
11. Please evaluate the following statements based on YOUR concerns in promoting Osteopathic distinctiveness. SA = strongly agree, A = agree, N = neutral, D = disagree, SD = strongly disagree
    - Will give allopathic physicians osteopathic physicians view themselves as "better"
    - Will give others the impression osteopathic physicians are inferior
    - The need for separate match days
    - The need for separate board examinations for medical students
    - The need for separate certifying boards
    - The impression we do not want to work with allopathic physicians
    - The impression osteopathic medicine only incorporates OMT
    - The impression that osteopathic medicine focuses on "feelings" not scientific fact
    - Other (please specify)
12. Do you feel this survey adequately reflects current issues regarding Osteopathic Distinctiveness?
13. Do you feel this survey tool is easy to use?
14. Please express any comments/thoughts