

Title: Should I stay or should I go? A look to the current practice of surgeons from a professional identity perspective

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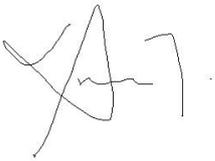
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1. Introduction and problem statement

The development of professional identity has been explored in different specialties of medicine, including surgery. During the last years, there is a perception that a significant number of surgeons have decided to choose early career retirement in Colombia. At the simplest level, at very least this phenomenon represents a loss of investment, resources and time, and probably a shortage of surgeons for the healthcare system. However, considering that general surgeons will practise for approximately 30 years from completion of training to retirement (Williams and Ellison, 2008), almost 20% of them will leave the specialty early, voluntarily or involuntarily (Harms et al, 2005). In this group of surgeons who leave the specialty in the beginning or in the middle of their professional life, the lifestyle, burnout and work-home conflict appear as major factors for the decision (Dyrbye et al, 2012). As a consequence, this decision affects negatively the healthcare system in terms of economic cost and workforce issues.

Considering the global crisis in the surgical workforce, there can be expected a major impact on the healthcare system in the coming years. Recent initiatives, such as the Lancet Commission on Global Surgery in January 2014, recognised the importance for development of safe, essential, life-saving surgical and anaesthesia care in low-income and middle-income countries (LMICs) (Meara et al, 2015). In this project, the surgical

workforce is a fundamental issue. However, according to the WHO Global Surgical Workforce database there is a supply of 1,112,727 specialist surgeons around the world and it is expected that there will be an additional 1.27 million providers per 100,000 populations by 2030 (Meara et al, 2015). Taking into account the insufficient rate of replacement of surgeons and the decision to take early retirement for healthcare systems, especially in the LMICs, the impact to leave the specialty is an issue with enormous repercussions for the health of the population. In addition, the impact of surgeons' early retirement in terms of cost is dramatic for health systems. For instance, in Canada, surgeons, after family physicians, are responsible for 24.6% of early retirement caused by burnout (Dewa et al, 2014).

But beyond of the work-force issues, it is possible that most early-retired surgeons begin a negative process of "professional identity deconstruction", affecting their professional life, career transition and practice. If it occurs, this process may be just the tip of the iceberg, since it is embedded in a more complex socio cultural context where identity is constructed as well as deconstructed. There is not available literature supporting these observations. Nonetheless, the recent changes in the global context of surgical practice would influence the professional scope of a surgeon nowadays, as well as the professional identity. Most of these changes are common to the Colombian context. For instance, the increasing specialisation and fragmentation of practice among surgeons, the length of training, changes in the work environment related to the number of working hours, excessive workload, malpractice issues, poor

reimbursement, lifestyle issues and diminishing interest in the field among medical students (Stabile 2008; Reid-Lombardo et al, 2014). Also the evolving expectations of the community about medical practice, and technological innovations have changed surgical practice in recent years (Hillis and Grigg, 2015; Himidam and Kim, 2015).

As a consequence, surgeons are in a permanent struggle between the pressures and the accelerated changes in the health system and the society in general, and the principles of a professional practice, in terms of science and art. These elements would be related with changes in their professional identity that would help us as medical educators to understand what are the challenges for the surgical profession today and its implications for the education of future surgeons. In essence, thinking about what are the contemporary elements of surgeon's identity opens up the question of how a surgeon's identity might influence the decision to remain or leave the professional practice. In particular, this study is interested in evaluate if surgeons' who left the professional practice started a process of "identity deconstruction" and what are the representative elements of this process.

2. Literature Review

2.1. Scope of the literature review

The purpose of this review is to summarise the most relevant perspectives of Professional Identity Development and Professional Identity Deconstruction analysing the scope of these perspectives in the field of Health Professions Education. This step of the review intends to explore the main components of both sides of the coin (development and deconstruction) taking into account personal and social perspectives, as well as the scope and limitations of these views in the field of HPE. After defining these theoretical foundations, the review focuses on summarise the best available evidence about the process of identity development in the field of surgeon's professional practice.

For the last purpose were included studies confined to the theoretical framework of identity and global surgical practice, published from 1980-2015 in the English or Spanish languages. The included studies were original published papers and/or original reports from conference abstracts, longitudinal or cross sectional designs involving qualitative and/or quantitative methods, editorials, reviews, letters to editors, comments and studies reporting associations between professional practice and surgeons' identity development.

The key words used were: Social Identity Theory, surgery, dropout, attrition, early retirement, professional identity, identity development, identity deconstruction, medical education, health professions education.

2.2. Theoretical framework

2.2.1. Identity development: An integration of individual and social perspectives

Identity development is a process that advances and changes over time and it is at the same time personal and social. Individualistic approaches to identity (e.g. identity status, socio-cognitive and narrative theories) conceptualise identities as personal orientations developed in the social world, in terms of the mutual relations between self and society (Monrouxe and Rees, 2015). On the opposite side, the social and contextual approaches (e.g. Social Identity Theory), have proposed a social-psychological perspective around intergroup relations, group processes, and the social self (Monrouxe and Rees 2015; Hogg 1995). In simple terms, the first perspective is based on attitudes, behaviours and individual attributes, and the second is focused at the group level. Nonetheless, Brown and Bimrose (2015) describe several elements that are *historically* common, intrinsically linked and characteristic of identity construction in both perspectives. The first is *self-awareness*, in terms of the meaningful sense of belonging or being part of an entity. The second concerns *continuity and change*. Continuity refers to the “*sense of connection to an occupational*

identity that extends beyond a particular role and exists over time” (relative to psychological, social and ideological anchors), and change refers to the working transitions across working life. These transitions provide a “meaning-making aspect” of the career and a sense of attachment, stability, maturity and definition. The third component concerns *social norms and discourses*, used by individuals to represent themselves to others, and create a common core of identity, which in turn influence beliefs, attitudes, behaviours and decisions. Finally, both perspectives involve a structural dimension where the occupation is shaped in response to societal pressures. This denotes the influence of the labour market, employability, salary, and administrative organisation and socio cultural and political issues within the occupation, career or profession. In turn, these elements determine career choice, expectations, pathways, opportunities, stigma, and relations to power, ideology, and prestige, among others (Brown and Bimrose, 2015)

Similarly, from a *narrative* perspective, identity construction is also personal and social. From this viewpoint, the individual’s reflection, experience and expression form “narrative acts” (based on personal projects and stories) to influence and engage others in the process of developing a shared vocational identity (Brown and Bimrose, 2015). Sharing the definition of identity from a narrative perspective, thus represents an integrative process where multiple meanings of the people’s experience, defines the core elements of their social identity.

2.2.2. Individual and social development: A place for Social Identity Theory (SIT)

Based on these considerations, one of the most potent theories about Identity Development is Social Identity Theory (Tajfel and Turner, 1979). Even this theory is social, also add some elements from the psychological theory of intergroup relations and group processes, defining a permanent relation between individuals and groups. Originally, the theory was formulated forty years ago at the University of Bristol, but continues to be fully in force and has been applied in multiple disciplines, including medicine.

Tajfel and Turner (1979) define a *group*, as a basis for the further development of their theory, as a *“cognitive entity that is meaningful for the subject at a particular time”*. This definition denotes the importance of particular situations at societal level that people recognise as relevant for themselves and relevant to belonging in specific groups, and not only the encounter between people. In this context, these relevant situations are related to different components involved in being part of a group. These are associated with knowledge about group belonging (cognitive), to the connotation (positive or negative implications) of being part (evaluative), and finally to the emotions related to belonging (emotional).

The fundamental theoretical concept is that a *social category* (e.g. profession) into which an individual falls, and feels to belong, provides a definition of who the individual is. In this matter, Social Identity Theory is a social construct that mediates between the person and society because by defining the characteristics of the category

(group) it is possible to define the characteristics of the individual in terms of their self-concept (Hogg et al, 1995).

Tajfel and Turner (1979) recognised that *categorisation*, defined as: “*a process of unification of objects and social events in groups that are equivalent with respect to the actions, intentions and belief systems of an individual*” is a pivotal element in social identity development. This is the basis for comparisons and contrasts between different groups and individuals who belong to these groups in simple terms of “me” and “them”. In turn, categorisation is important because it creates and defines the position of an individual in society, since they can only develop as individuals within society and not alone.

According to these concepts, *social comparison* represents a critical component in Social Identity Theory. Social identity becomes significant only with social comparison between groups and their own differential elements defined previously in categorization, and this process is a source of evidence of “reality” that matter in terms of social reality (Tajfel and Turner 1979). The perceived differences, and the connotations of value of these differences, acquire relevance for individuals belonging to different groups. Tajfel and Turner (1979) recognize that if a group does not offer adequate conservation of positive social identity for individuals, they will leave the group.

Tajfel and Turner (1979) support the idea of social comparison, based on Ted Robert Gurr’s concept of *relative deprivation* to structure the concept of social identity. This is

the "*perceived discrepancy between value expectations and value capabilities*" or the discrepancy between what people think they deserve, and what they actually think they can get (Gurr, 1970). Following the Gurr concept, failures related to expectations or the inability to reach them, is manifested in personal, interpersonal and group dimensions. In general, individuals or groups would make comparisons with regard to their own status, or past expectations, and their current status or expectations.

In relation to these arguments Tajfel and Turner (1979) define social identity as "*that part of an individual's self-concept which derives from the knowledge of belonging to a group (or groups) along with the social and emotional significance attached to that membership*". Based on these arguments, social identity is the result of group membership.

2.2.3. Identity Deconstruction: A personal or social matter?

Following the arguments of French philosopher Paul Ricoeur, described by Fuch (2007), the essence of the human person is in continuous movement over time, acting and speaking to provide self-understanding. This is defined by Ricoeur as ipse or "ipseity": "*the ipseity or selfhood of the person opens up the sphere of responsibility and faithfulness, of the values and norms we adhere to, and thus establishes the historical continuity that we regard as essential for personal identity*" (Fuch, 2007). This concept is related to others, so is established in the social world. Fuch describes

how MacIntyre, Carr and Ricoer, believe that the identity represents a meaningful coherence of the past, present and future, and that the person is the only author of their own story. These arguments had been used to describe the personal identity fragmentation as a deconstruction of the narrative self.

From a social perspective, according to Social Identity Theory, Tajfel and Turner (1979) suggest that if identity is developed in the social world, the recognition of social identity implies multiple consequences in terms of belonging to the group. This element of recognition (by self or by others), is a critical piece that confers to the theory a powerful scope to consider the other side of the coin, specifically how identity into the group can be deconstructed. Some of these elements are:

- a) The individual will tend to stay in the group and not seek membership of new groups if they have any further contribution to make to the positive aspects of social identity
- b) If the group does not meet with the previous requirement, the individual will tend to leave it, except if: 1) leaving of the group is undesirable for "objective" reasons or 2) conflicts appear between the individual and group values, which contribute to an acceptable individual's self-image.
- c) Some solutions to the previous situations are probable: 1) change or justify the interpretation of the group attributes (e.g. negative attributes); 2) accept the situation as it is, and engage in social action that would change the situation in the desired direction.

d) Finally, no group is entirely isolated because all groups coexist with others.

From a social perspective of identity, one of the central cognitive processes in Social Identity Theory is depersonalisation, or seeing the self as an embodiment of the in-group prototype “a cognitive representation of the social category containing the meanings and norms that the person associates with the social category; rather than as a unique individual” (Stets and Burke, 2000). Based on these assumptions, categorisation within social identity is enough to foster depersonalisation.

2.2.4. The scope of the identity perspectives in Health Professions Education: evidence and limitations

Research on identities, matters in medical education. During the last decades, Tajfel and Turner’s work on intergroup relations has been increasingly cited and recognised particularly in the social sciences. Three reasons explain this: the explanatory power of the theory, the work’s scope to create theoretical and empirical controversies, and finally the extent of the work as a theoretical framework for several investigations (Dumont and Louw, 2009). However, the number of publications in the field of health is limited, and particularly there is no available information focused on identity deconstruction.

Some researchers have focused on the intergroup, interpersonal, and intrapersonal processes in groups with diverse historical, political, and economic backgrounds to

explain group differences in health (Major et al. 2013). In addition, the theory has been applied to describe the impact that invisible illness has on identity, and the influence of intergroup identity on effective multi-disciplinary teamwork in healthcare providers (Kundrat and Nussbaum, 2003; Lloyd et al. 2011). Unfortunately the scope of the theory in medical education is limited and few of its components can be identified in a systematic manner.

Even with these limitations, some authors recognize an existing relation between personal and social elements during identity construction in medicine. In essence, identity formation in medical education can be seen as a process resulting from social and relational processes. Particularly, it has been suggested that professional identity is based on interactive experiences (in terms of interpersonal and intergroup relations) as part of student teaching and learning processes (Goldie, 2012). At the same time, this process is built on self-regulated practice, where students and postgraduate trainees are able to identify themselves in relation to others. For instance, the “discourses of competence” (e.g. discourses of confidence, capability and suitability) and the “ethics of care”, propose that medical students discover societally what they consider to be necessary as part of their identity development (MacLeod 2011; Konkin and Suddards 2012). Conventionally, these discourses are established in social professional circles and clinical settings, intrinsically linked to communities of practice, collaborative learning, and interpersonal skills to support the student’s well-being, experiential learning and motivation (Lovell, 2015). Similarly, inter-professional learning (e.g. medical and nursing students studying together) contributes to increase

the respect for other professions and reaffirm the value of their own professional development, based in social comparisons (Helmich et al, 2010). In turn, it is suggested that all of these interactions generate personal narratives of lived experience that enhance reflection, expectations and expression with regard to professional identity (Wald 2015; Wald et al, 2015; Miller et al, 2014). Added to this, career changes or professional transitions (e.g. from medical student to doctor), play a major role in identity formation (Wong and Trollope-Kumar 2014).

These components are also identified in medical teachers. Comparably, medical teachers' identity can be seen as a social process. Recent evidence supports this assumption based on the observation that "status" in the academic community is influenced by the mode in which teachers relate with others to advance their careers. In turn, faculty development (staff training) influences the institutional culture, and *vice versa* (O'Sullivan and Irby, 2014). In this context, through the lens of the Social Identity Theory, it has been possible to explore career transitions in academic physicians, especially to investigate how identity threat influences decisions about retirement. These threats are manifested in social and personal dimensions of identity related to self-esteem and loss of meaning and belonging (Onyura, 2015).

2.3. Surgeons' identity development: Personal and social views

Orri et al. (2014) in an interesting publication regarding the factors that affect the surgeon's practice and well-being, describe important attributes with regard to the surgeon's identity in terms of ritualistic and socially constructed ideas that are implicitly transmitted from generation to generation. In their publication, the authors enumerate several shared social values contributing to a meaningful profession and ideologies based on self-confidence and expectations, conceptualised in terms of moral imperatives. These elements are embedded in a framework of surgery as art, performed individually in a particular scenario (operating room) motivated by visceral feelings and executed as a manual task (Orri et al. 2014). These elements shape a unique individual experience in the context of a powerful culture that values competency and fosters autonomy (Mutabdzic et al. 2015). Similarly, the surgeon's identity is formed by a strong ability in surgeons to deal with challenge and adversity motivated by self-determination, focus, ambition, grit, curiosity, perfectionism, obsession, vision, control and paranoia (Evers, 2015; Jupiter, 2014; Casell, 1987). Some of these attributes contribute to identify surgeons as individuals with the highest rates of disruptive behaviour and resistance to change, which has strong repercussions in the work-environment and patient safety (Cochran and Elder, 2014; Stevens, 2012). Supported by Tajfel and Turner's seminal work, recent information indicates the surgeon's proclivity to maintain the distinction between "us" and "others" (other

individuals in the surgical team, such as nurses) as a major barrier to the surgical team identity and the origin of difficult relationships (Rodrigues et al, 2013).

Today surgical specialty training, in most places around the world, continues to be influenced by William Halsted, a North-American pioneer doctor of modern surgery and the German-influenced model of training. Halsted established two important characteristics of surgical training: “graded responsibility” for the trainee surgeon, and the development of a competitive surgeon (O’Shea, 2007). Within this framework, becoming a surgeon continues to be a social process, mediated by power and hierarchical relationships (responsibility) and competitiveness. Therefore surgical residents are subject to complex decisions related to errors, adverse events and complications in daily practice. As a consequence, surgeons are conventionally trained for assertive decision making with little possibility for mistakes, and grow in a culture where punishment is common and the disclosure of errors is not always done (Luu et al, 2012; Martinez and Lehmann, 2013).

In turn, most specialty trainees spend a lot of time undertaking their training duties and finding fulfilment with the discipline leaving little time for themselves and their families (Longo, 2007; Hochberg et al, 2013). These cognitive and non-cognitive demands are regularly defended in terms of maintaining high standards and prestige, embedded in a surgical culture of quality and improvement (Baschera et al, 2015; Cristancho and Fenwick, 2015). These features appear to be part of professional

socialisation even in the early years of medical training in the surgical 'hidden curriculum' (Hill et al, 2014). In this context, recent evidence suggests that medical undergraduates negotiate the hidden curriculum, building networks of relationships and accumulating the practical achievements required and displaying the personal characteristics expected of surgeons (Hill et al, 2014). Thus students identify themselves, and are identified by others as future surgeons, being able to fit in the surgical culture. Some students who do not fit exclude the possibility of becoming surgeons. In part, the lack of personal respect related to the surgeon's stereotype, predominantly self-confident and intimidating, has been identified by undergraduates as one of the most common violations of medical professionalism and one of the reasons to avoid a surgical career (Sullivan et al, 2014; Hill et al. 2014b).

3. Methods

3.1. Study Design and Research Questions

This is a qualitative study focused on analysing the main elements of the surgeon's identity development in Colombian surgeons' after two decades of health system transition from a public model to one based on the market and health assurance. Considering these elements, this study explores if the surgeons who left the professional practice during the last ten years started a process of surgeon's identity deconstruction and if so what are the main elements that characterize this process. This study pose the next questions: 1) What are the elements that characterize the current surgeon's professional identity in Colombia? 2) Does surgeons who leave active professional practice initiate a process of deconstruction of their professional identity? 3) If so, what are the representative elements of the surgeon's professional identity deconstruction?

3.2. Participants

The total number of participants was fourteen, distributed in two groups (Group 1: active surgeons in Colombia and Group 2: surgeons who left the professional practice

in Colombia). It is important to highlight that considering the iterative data collection and saturation of information during analysis (please see below), were considered ten participants per group, following the recommendations of Watling and Lingard (2012) with regard to principles for sample size and further analysis until saturation of information appears (no new data emerge). Following these recommendations, participants in Group 1 were ten surgeons (nine men and one woman) with ages ranging from 41 to 53, identified by purposeful sampling. The surgeons were selected from public and private institutions and teaching and non-teaching hospitals, to provide a broad framework to appraise the phenomenon. Nonetheless, the participants in Group 2 were three men, with ages ranging from 41 to 55 identified by snowball sampling. The sample of this group was difficult to complete because of the sensitive nature of this study and the rejection by some individuals of the request to participate. Considering the limited number of participants in the Group 2, was contemplated that this number is still useful because these surgeons come from academic (one on them) and business settings (two of them) and have extensive knowledge of the Colombian health and educative sectors given their current positions.

3.3. Procedure

a. Data collection. The data were collected by face-to-face semi-structured interviews of participants in their natural setting. The interviews were conducted after voluntary acceptance by the participants, describing the purpose of the research, what was expected from them, and how the data from the research were planned to be used. The protocol was reviewed and accepted in its methodological ethical aspects by the Commission of Medical education (Faculty of Medicine, Universidad de la Sabana, Colombia).

The interviews comprised an Interview Protocol, following the recommendations of Assmussen and Creswell (1995). All interviews were conducted by the main author (Dominguez, LC) and were recorded in an audiotape device. The interviews were conducted during 30 - 45 minutes and included for both groups the next six open ended questions:

1. What do you consider as the main personal attributes that difference surgeons of other kind of medical practitioners?
2. What do you consider as the main social attributes that difference surgeons of other kind of medical practitioners?
3. Does surgeons experience decisions throughout his professional life in which to stay or leave the profession are critical issue? What is your experience with it?

4. How personal and social attributes act during those decisions?
5. In either case, persist or leave the professional practice, which is the balance of gains and losses for the individual and the profession?
6. A person who abandons the practice of surgery lacks his/her attributes as surgeon?

b. Qualitative Data analysis. In this step, the adopted method was a Grounded Theory Approach following a systematic design (Creswell, 2014). According to Creswell, a grounded theory design is: *“a qualitative procedure used to generate a theory that explains, at a broad conceptual level, a process, an action, or an interaction about a substantive topic”* (Creswell 2014, p.451). The information was analysed using a deductive analysis (content analysis) against the theoretical framework of identity development previously stated. This process was accomplished following the steps described by Fisher (2009), Hycner (1985), Jha and Price (2014). The interviews were not transcribed into text data. The main researcher (Dominguez LC) bracket and listen the interviews from audiotapes and then ascribed the units of general meaning. Following this step, were identified and coded the general units of relevance for this research and then these units were clustered in a more general units of meaning. Finally these units were conceptualized in general themes. Two external surgeons from the Department of Surgery of Universidad de la Sabana verified this process of unification, cluster and conceptualisation in order to ensure the accuracy of the initial interpretation performed by the main researcher (Domínguez LC).

Finally the main researcher return to the interviews to validate the final analysis in order to assure, in conjunction to previous inter-rate assessments the appropriate correlation of categories (concurrent validity), the link up of categories with a set of theoretical assumptions (construct validity), the appearance of categories and how they looks to the informed or external observer (face validity) (Jha and Price, 2014). Finally was performed a quantitative data analysis to measure the he number of times each participant mentioned some aspect in the units of each category. The information is presented in percentages.

4. Results

The results showed different elements that characterize the current surgeon's professional identity in Colombian surgeons considering the market-based characteristics of the health system. The analysis showed different units of analysis, which could be categorised in the first two broad groups of themes: Theme 1: individual level of surgeon's identity, and Theme 2: social level of surgeon's professional identity. The first theme is composed one category of analysis represented by twenty-four general personal attributes between two groups of surgeons (active and those who left practice) (see table 1). The second theme is composed by four categories of analysis (grouping twenty-six relevant units of meaning): Category 1: issues in current professional practice; category 2: social visions of surgeon's professional practice, category 3: issues in surgeon-patient relationships; and category 4: issues in surgical education (Please see Table 2).

In table 5 is showed how many times any of these units is mentioned by participants of each group. For the first theme, in both groups, leadership was identified as the most mentioned individual attribute of surgeon's identity as well as commitment with the patient care. Attributes as manual dexterity, surgeon's image and innate attributes were not mentioned by participants of Group 2. Finally, at least more than a half of participants in each group mentioned some attributes as comprehensiveness, prudence, ability to problem solving, communication, sacrifice, scientific knowledge, sensitivity and compassion, and service.

Regarding the second theme, the influences of managed care (visions of economic status and visions of prestige and reputation (category 1), visions of economic status and visions of prestige and reputation (category 2) were mentioned by all participants in both groups. Some units as visions of surgeon's origin were not mentioned in Group 2 (see Table 5). Finally, at least more than a half of participants in each group mentioned the changes in the professional practice after Law 100, landmarks of daily surgical practice and outcome based practice (category 1), visions of family issues, visions of institutional prestige, visions of power, surgeon's self-perception, visions of responsibility and visions of workload and surgeon's available time (category 2), confidence, deterioration of surgeon-patient relationships and quality of care (category 3), role modelling, selection processes, traditional and contemporary issues in surgical education and visions of academic versus non-academic surgery (category 4).

Regarding the second and third research question, the analysis shows a third theme represented by the decisions to persist or leave the professional practice. This theme (see Table 3) is composed by three categories of analysis: causes, consequences and moments for decision, grouping sixteen meaningful units. All participants in Group 2 mentioned the defence of professional principles and the life-style issues as main causes for leaving practice (see Table 5). In more than a half of cases in this group the need for differentiation from other specialists, the routine or surgical practice and the pressures of health system were mentioned as additional causes. In group 1 family issues, frustration, health pressure, life style, routine and social / economic pressures

were mentioned as potential causes for leaving (see Table 5). Finally, the results show 90% of participants (Group1) and 100% of participants (Group 2) mentioned that personal attributes are never lost after leaving the practice (see Table 4). This is described as a four theme composed by two categories of analysis: category 1: Conservation of surgeon's attributes after leaving professional practice, and category 2: Loss of surgeon's attributes after leaving professional practice.

5. Discussion

5.1. Surgeon's identity in the Colombian context

Identity development has been classically appraised from two different perspectives. The sociological perspective recalls the influence of different social determinants in the identity development. A second perspective emphasizes that identity development works as a result of satisfactory psychological processes (e.g. self-esteem, motivation, prior experiences). As their principles, the practical scope of both perspectives is different. Whereas the scope of the sociological is focused in-group dynamics influencing the individual, the scope of the psychological is focused in the individual's desires, self-efficacy, internal attribution and motivation. In the context of this research, from a broad frame, both perspectives would explain the driving forces involved in surgeon's identity formation. In simple terms, these perspectives would explain how a person becomes a surgeon. The results of this research show that there are common elements of the surgeon's professional identity recognised by both groups of participants, ranging from personal to social attributes which unify actions, intentions and beliefs, according to the Tajfel and Turner's definition (1979), to explain the distinctiveness of surgeons in the context of medical specialties. Among active surgeons and those who left practice were recognized different individual attributes related of surgeon's identity on basis of leadership, communication, comprehensiveness, prudence, ability to problem solving, communication, sacrifice,

scientific knowledge, sensitivity and compassion, and service, among others. In this context is recognized by surgeons of both groups, that surgical profession is developed on a basis of attributes beyond of the manual dexterity, which although it is recognized as a fundamental and important, not necessarily defines the surgical identity exclusively.

Similarly, all participants commented that the surgical profession is developed under certain social attributes, distinctive not only among medical professions but the society in general. In general, surgery is recognised as a highly demanding profession, where to conserve high standards and status it is required to deal with errors, uncertainty, adverse events and complications in daily practice. These conditions motivate surgeons to move in a sphere of a highly emotional and stressful profession. In this context, to maintain professional status it is necessary to spend a lot of time in hospital duties and work environments. Surgical profession requires permanent “personal sacrifice”, and even more “family and social sacrifice”, because complex cases and workload is associated with more chances of legal complaint, demands and institutional pressure. This sense of greatness and ability to face major challenges indicates that the surgical profession requires family and social cost, which other people have to bear. Therefore, whoever decides to be a surgeon should be surrounded by people who understand the magnitude of this career and are willing to endure it. Considering these challenging characteristics, the surgical profession in Colombia is, nevertheless associated with poor reimbursement and salaries. For these reasons surgeons recognised that nowadays it is necessary to have two, three or even

more simultaneous jobs in different hospitals to maintain “high living standards and status”, as the surgical profession requires. Facing this reality both groups of participants recognized that surgery is a respectable profession requiring more privileges in society and in the health and educative system to avoid the surgeon becoming perceived as just a technician.

Since both groups agreed on these attributes, it was particularly striking that all surgeons who left practice agreed that personal attributes are never lost, and how these attributes also contribute to being successful in other positions in the business world, academic and industry. Even more, these “surgeon’s attributes” are recognized by other professionals as highly valued and not easy to find among people in these sectors. *Based on these facts it is difficult to assume that the core of personal attributes is lost in a person who leaves professional practice, which suggest that there are insufficient evidence to develop a substantive theory of professional identity deconstruction in the individual level. Nonetheless, according to the Turner and Tajfel’s framework* there are some elements among surgeon’s who left the practice that would indicate the lack of social attributes. For instance, in 100% of participants were identified lifestyle issues, and in 66% routinizing practice and the desire differentiation from others in terms of their professional scope. However these aspects are not necessarily related to conflicts between the individual level as surgeons and the group values. On the contrary, they have used successfully their self-image and identity as surgeons in other professional positions. This fact is also widely recognized for active surgeons.

5.2. Decisions to persist or leave practice: Do rationality influences identity deconstruction?

An important piece of information in this research is related to the decisions to persist or leave the professional practice and how these aspects would be related to the surgeon's identity. It would be appropriate to ask if a surgeon could become an ordinary person when he/she decides to stop practising. Are really the perceived discrepancies between the social and individual expectations, and the divergence between what people think that surgeons deserve and what they actually can do, enough reasons to explain why some surgeons leave the professional practice? The central topic turns around a central issue: the human essence and the duties. They may superficially seem the same. For some surgeons' "surgery is life", but other surgeons consider the professional career as a surgeon as "part of life", or a single facet of a large dimension, in terms of the human spirit. Where is the truth and what is the scope of these claims? Therefore, one thing denotes what a person is, and another quite different represents what a person does in a social world.

A main assumption is that these decisions, are not necessarily determined by sociological and psychological factors acting independently, but also by a judgemental subjective process of decision-making influenced by "satisfactory" rather than "optimal" consequences to the surgeon, as decision-maker. Within this frame, a main

supposition, and simultaneously a preliminary conclusion of this research, is that these “satisfactory” choices made by surgeons converge, are aligned in first term, with the “dimension of being” to influence the “doing dimension”.

A central element identified among active surgeons and those who left the practice is a permanent tension between the surgical specialty demands and individual sense of well-being in the professional life in Colombia. All surgeons identified particular moments in their lives where it is important to decide how to deal with the profession, whether to remain or leave, in order to maintain direction and equilibrium for themselves. Particularly, more than a half of both groups identified how family issues, life style and health introduces a remarkable sense of wellbeing, as mean and end, permeating their lives in some moment. Surgeon’s identity is fundamental to solve decision problems, where a deep sense of “personal satisfaction” dominates the choice.

These judgemental processes are important because they would help to explain the nature of identity formation, but also because they represent a serious critique of the social and individual perspectives of identity. These interpretations require future studies. The bases for these criticisms are the major gaps in the theoretical frameworks of identity, which has been not understood as a rational process (a process of decision-making). A gap in the sociological perspective is that the explanation is given in holistic terms. Even the existence of the individuals is not denied; the process of decision-making is not fundamental. For instance, the concept

of social categories in Tajfel's work (e.g. profession) into which an individual falls, and feels to belong, defines who the individual is, but not why the individual decided to be part of it. A gap in the psychological perspective is that although the focus is in the individuals in terms of their beliefs, attitudes and behaviours, they are not necessarily considered rational. The rational perspective explains how the individuals are voluntarily able to choose according to their expected preferences (rational actors). The rational is not a perspective without actors or a perspective with non-rational actors (Tsebelis 1990). This perspective helps to explain the implications and consequences of means rather than ends in the decisions (Tsebelis 1990; Elster 1983; Elster 1986, Hindmoor 2006). As an assumption, decisions help to define professional identity, but this perspective requires further analysis.

These features are important because all of interviewed surgeons refer their arguments as turning around of a common element: the ability to choose. This ability is represented by such decisions as "select or not to select the surgery specialty", "persist or leave practice", and "make good or bad decisions". One explanation is that in daily life these seeming decisions are in permanent conflict by the disagreements between the individual and the observed behaviour. Gurr's (1970) arguments would help to understand this partial explanation, assuming the supposed discrepancies between what people think that surgeons deserve in Colombia, and what surgeons actually think they can get. Any observer in society, family, surgical team or peers, might see only a narrow angle of the decision-maker in each one of the previous situations, and judge the decision to remain or leave the professional practice as

“optimal” or “suboptimal”. Even this research did not explore this specific element of the social perspective of the surgeon’s identity, the available literature supports the surgeon’s professional life as a fascinating field of knowledge and practice, in terms of science and art. Consequently, belonging to the surgical world entails privilege, selectness and distinctiveness in the social arena. From the unsuspecting eyes of any observer in society, who may reject an “optimal” world like this? The difficulty in understanding it is related to the inner look of a decision maker. On the opposite shore to outside observers, the surgeon who decides to persist or leave the professional practice, could have a completely and contrary vision of the same problem. Probably his/her sense of “optimisation” is different. Perhaps the decision-making is based on “satisfactory decisions” instead of “optimal” consequences. This is because the observers (peers, family and society) are focusing the attention only on one game, but the surgeon as a decision-maker is involved in multiple and more complex games. As a result, in daily life the “satisfactory decisions” are more common than “optimal decisions”, since the rationality is composed not only by rules and axioms but also by other factors as intuition and feelings (Goodwin & Wright 2004, p.16).

One important circumstance is that what is really important for all interviewed surgeons is to maximise their own wellbeing. Whether to persist or leave maximises their utility, and this decision represents an appropriate relationship of means to ends in their lives. From a perspective of health professions education, the main purpose of this analysis is to try to understand the arguments of these surgeons to persist or leave practice in order to understand a bigger dimension of professional practice focusing in

the process of decision-making just from a “descriptive approach” (Kanehman’s and Tversky 1981).

This perspective helps to elucidate how decisions are made (descriptively) instead of how the decisions should be made (normatively). Thinking descriptively avoids external judgements, and provides new insights to understand identity, in a “non-normative perspective”. The traditional dogmas are very common in the surgical arena because it is extremely frequent to find “stereotypical behaviours”, or what it is expected to be when someone decides to become a surgeon. But here lies the problem, the problem between the human essence and the duties. Surgeons’ exhibit common individual attributes influencing what they are as surgeons. In this research was found that surgeons are leaders, proactive, efficient and exhibit high levels of self-efficacy, grit and resiliency. But these attributes would be also common to other professions, and even more are common to other people involved in ordinary jobs. So individual attributes are not archived necessary as being surgeon, these attributes can be orientated to practise the profession, probably to be a “successful surgeon”. These attributes are part of the “being dimension” to impact in the “doing dimension”. For these reasons none of the surgeons who left practice feel that they lost their individual attributes, but they recognise that in some cases people who left practice, or training (residency positions), do so for lack of personal attributes that are not properly identified during the selection process. Their human essence is intact, but their profession can change. They can serve with the same core of attributes in another positions different to surgery. Translate this arguments into practice might have an

impact during selection processes. Even more, they consider that the surgeon's experience is a powerful force for a better practice in new positions. The central fact is that identity formation is not just a matter of good attributes and sociological factors, but also choices and consequences.

Nonetheless, most of traditional elements regarding the absolute representations to become part of surgery are actually described from a normative perspective. These factors can be founded following the main arguments of Tajfel's Theory (1979) in terms of categorisation and social distinctiveness of groups. So the individual who becomes to be part of the surgical world assumes different roles that naturally, and "normatively" are assigned. As a result "to be part of", is the result of socially constructed elements that distinguish surgeons from other specialties, and structurally given to the members. Basically, being part, as normatively is accepted, is a "classical" pathway to be.

If these principles are appropriately applied, the decision to become or not become part of the surgery profession is the result of "satisfactory" decisions to the surgeon but not necessarily the result of "optimal" decisions. In this point, what motivates the decision to persist or leave is associated to "decision problems". The decision problems are defined by Tversky & Kahneman (1981) by the acts or opinions among which people must choose, the possible outcomes and consequences, and the contingencies or conditional probabilities that relate outcomes to acts.

Surgeons who decided to persist in their professional practice understand it as an opportunity for personal and academic growth. However, and considering the complex world of surgery, they recognise that this is not an “easy job”, because they have to deal with big challenges, work-pressure, workload, extreme long working hours, as well as they have less available time for personal and family life. Even more, they recognised that their salary is not competitive in comparison to other specialties. From a normative perspective, who wants to work and live dealing with some of these adverse conditions? Probably this is not an optimal decision, but for these surgeons these are satisfactory reasons to persist. In the other side, in general the surgeons who leave practice recognize that their decision conducted them to a better personal and family life. They assumed new perspectives in other jobs, as industry and business, where they won a “quieter life”. Now, all of them accept that they have more time for family, marital and personal life. Similarly, in their professional life, now they have to deal with complex task, but they recognize themselves as people with special talent, a “talent to be a surgeon”, that help them to deal more easily with new horizons in comparison to non-surgical peers. Considering their surgical identity is is not modified by their decisions, in simple terms they continue been leaders with proactive behaviors and abilities to deal with particular jobs being surgeons. Due to these reasons with the available data is not possible to derive a grounded theory to explain identity deconstruction among surgeons.

6. Conclusions, limitations and future research

From these observations, the constitutive elements of surgical identity are shared by individual attributes and social attributes to deal with complex professional duties. A first conclusion is that surgical practice is associated with particular professional duties, shaping some elements of identity, represented as excessive and complex cognitive and non-cognitive demands to maintain high standards and prestige. Likewise, the duties are related to excessive clinical workload where surgeons are also subject of emotional demands related to errors, adverse events and complications. In this scenario there is a high possibility of error requiring good assertive decision-making skills to deal with patient safety and clinical outcomes. To choose this professional practice, and then to persist or leave it, particular attributes are necessary. A good balance between the human essence, in terms of the core of individual attributes, and the duties is a source of an adequate equilibrium in personal and professional life, understanding the rational principles as driving forces to persist or leave the surgical practice. In this context whatever the choice, the decision does not necessarily lead to the individual or profession deconstruction, but places surgeons in an area to maximize their own utility, being part or not of the professional world. This fact represents the consequence of satisfactory decisions rather than optimal decisions for the individual in the “dimension of being” where more complex elements appear as decision weights, but not necessarily represents that these surgeons have lost their professional identity. These data suggest that surgeon’s who left the professional

practice in the clinical scenario, started a process of career transitions, but not of identity deconstruction. The explanations for these results would be in the few number of participants who left the practice, as well as in their successful career transitions. In particular, there were not identified cases of negative or not successful career transitions, in order to appraise the other side of the coin.

This research was embedded in classical perspectives of identity, however during analysis a rational perspective was elucidated that added some important arguments to professional identity development. In this context, leaving surgical practice is a phenomenon, conventionally appraised as an *event* from sociological and psychological perspectives. This research explored these phenomena considering that persist or leave in the profession are *complementary processes*, influenced by social and psychological determinants, but also related to the human judgment and the ability to choose. The process to persist or leave is constructed over time for each surgeon, but takes shape when specific "decision problems" appear across the professional life. This subjective process of decision-making was appraised in a more descriptive sphere instead of "normative", avoiding the classical perspective of "optimal and suboptimal decisions" to introduce "satisfactory versus optimal" decisions for the surgeon. Based in these arguments, this research explored some criticism to the sociological and psychological approaches to identity. For instance, considering leaving the surgical profession as event, the consequences of leaving the practice have been considered traditionally as negative. This connotation is related to a narrow angle of observation, usually from the perspective of institutions, peers and

society (as observers). This is because habitually the decision to leave the profession is considered "suboptimal", and the decision to persist "optimal". However, from the angle of the surgeon, as decision-maker, the consequences are not necessarily negative but also positive, because the decision is motivated by a sense of "satisfaction" rather than "optimization". Likewise, the individual consequences entail social consequences, which can be also positive or negative according to this reasoning. Further studies are necessary to appraise the impact of leaving practice for institutions, educative and health system, as well as for families and the society.

A comprehensive analysis of consequences, following this approach can shed new insights on the surgical professional environment, as well as the factors and mechanisms that play a role in the decision. Finally, a rational approach opens the door to appraise the phenomenon in conditions of risk and uncertainty, which can hardly be achieved through sociological and psychological perspectives. Since the decisions involve a complex interaction of individual factors, the use of methods of inductive reasoning (based on subjective rational premises) instead of frequentist statistics, can provide a comprehensive way to draw general conclusions from evidences that contain individual data.

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Table 1: Individual level of surgeon's identity

Theme 1: individual level of surgeon's professional identity			
General units of meaning (Categories)	Units of relevance	Meaning of unit	Quotations
Personal attributes	Commitment	Surgeon's ability to high willingness with patient care	The work does not end when one leaves the operating room, the patient cannot leave because requires a lot of commitment for many years (Active surgeon - Participant 4).
	Communication skills	Surgeon's ability to communicate effectively with patients, peers and society	Nowadays people need more than ever to establish good communication with the surgeon and doctor, because now the patient has a long list of questions that have read and learned on the internet (Surgeon who left practice - Participant 1).
	Comprehensiveness	A way in that all surgeons attributes are interrelated	The surgeon should be a good doctor, a good internist, a good urologist, a good gynaecologist. Surgeon must know medicine in its entirety (Active surgeon - Participant 7). Surgery is the most comprehensive specialty of medicine. The surgeon must be an integral person with good pathophysiological knowledge and manual skills (Active surgeon - Participant 7).
	Dedication and prudence	Surgeon's ability to willingness with patient care with prudence	The surgeon is someone laborious and prudent (Active surgeon - Participant 5).
	Executive skills	Surgeon's ability to translate theory into practice	The surgeon feels in some way superior to other specialists and this is given by the ability to heal almost immediately (Active surgeon - Participant 6).
	Heroism	Surgeon's ability to accomplish with nobility some activities anyone would make	Surgery is not in the hands but in the head. There is the identity of the surgeon. Surgery is a gym for difficult decisions, a space where you seek trouble to learn and solve. Heroism and arrogance is required to do what others would not (Active surgeon - Participant 2).
	Humanism	Integration of humanism into	

		medical practice	Feeling surgeon is different to just operate patients and make procedures. There are operators and technicians who have not cultivated his life, his person, his intellect and spirit to be a surgeon. Are they really surgeons? The surgeon is a humanist; so it is not only important to operate (Active surgeon - Participant 1).
	Innate or acquired skills	Surgeon ´s origin of attributes. Does the surgeon born or made?	I think one born surgeon and perfected in the art with training. There are surgeons who do it, but is a better surgeon who was born for this (Active surgeon - Participant 1).
	Interpersonal relationships	Surgeon ´s ability to interact in the society	Some personality traits are needed in terms of service attitude and interaction with others, as well as the ability to maintain good relationships, communication and leadership (Surgeon who left practice - Participant 1).
	Leadership	Surgeon ´s ability to lead	<p>I still see the surgeon as the physician with the greatest power of leadership among all specialties. The internist or paediatrician or geneticist should have these skills, but the surgeon more than anyone given the complexity and importance of what he does (Surgeon who left practice - Participant 1).</p> <p>Surgeon is a leader and this is a quality that must be strengthened in the social sphere and in the family, not only in the surgical environment. This element is enhanced practicing surgery. This is a surgeon ´s virtue (Active surgeon - Participant 5).</p>
	Life style	Visions of surgery as a lifestyle, not just as a profession	Surgery is a way of seeing and living life. You can operate and not be a surgeon. Surgery is a way to cope and walk through life. A surgeon is persistent, rigorous and seeks solutions. You don´t need to be operating to be a surgeon (Active surgeon - Participant 1).
	Manual dexterity	Surgeon ´s manual skills	The surgeon requires three-dimensional vision and manual dexterity. Whoever does not have these attributes will have a limitation to acquire the particular competences of surgical profession (Active surgeon - Participant 5).

	Optimism / trust	Surgeon 's disposition to expect the best	Surgeon conveys confidence and optimism to the patient, which leads to better results even when palliation is required, and if this is friendly is much better (Active surgeon - Participant 3).
	Passion	Feeling of enthusiasm, grit and enjoyment for surgeon 's profession.	People who choose to be a surgeon does not to get rich, they do it for passion. However, the economic dimension can change stuff (Active surgeon - Participant 4).
	Physical attributes	Physical attributes necessary to practice surgery	Surgeons are athletes. In fact there are very high performance athletes. Surgeons have to work at night, on weekends, operate on patients during long hours and have to do many things at the same time. They have many things to do and they have to concentrate to respond. Good surgeons have to practice exercise, lead a healthy life and be ready for hard work (Active surgeon - Participant 10).
	Problem solving	Ability to deal with complex situations and solve problems	Good surgeons are people who have a high ability to solve difficult problems and complicated situations of others, even other colleagues in the hospital or in life in general. That means that they are highly effective in what they do (Active surgeon - Participant 9).
	Prudence	Surgeon 's ability to balance the benefits and risks of acts related to professional practice	Surgery has changed in recent years and the surgeon must be aware that he/she cannot do everything. The surgeon must give the best for the patient. But if a surgeon does not have these capabilities should refer the patient to someone who treats better (Active surgeon - Participant 7).
	Resiliency	Ability to learn from error, complications and mistakes in surgical practice	Surgery carries a repetitive exercise to tolerate frustration (Active surgeon - Participant 2)
	Sacrifice	Surgeon 's ability o work towards sacrificing personal or family life aspects	In the other side there is a person, a patient. So this is the origin of sacrifice for the wellbeing of the other. This is the practice of sacrifice, which should be well understood because it can also have dire consequences for the surgeon, in terms of personal and family consequences (Active surgeon - Participant 2)

		<p>Sacrificed medicine means that this is done to others. The other should thank enough for the received benefit or the attempt to do so. There are specialties that have a greater sacrifice to those objectives in terms of personal sacrifice, study and risk (Active surgeon - Participant 2).</p>
Scientific knowledge	Surgeon ´s scientific knowledge	<p>Surgery is a mean, not an end. One does not assign patients to surgeries, but surgeries to patients (Active surgeon - Participant 3).</p> <p>The surgeon is a real scholar. He likes to study and is skilful (Active surgeon - Participant 6).</p>
Sensitivity and compassion	Capacity to suffer and understand the pain of others	<p>The surgeon must be a person with discipline and assertiveness who can grow and learn from their failures. The surgeon must have a great ability to feel human pain (Active surgeon - Participant 1)</p> <p>Pain and human tragedy is very close to surgeons. So surgery allows one to grow as a person (Active surgeon - Participant 2)</p>
Service	Ability to understand the surgery as a profession to serve others, involving altruism over personal benefits	<p>Today more than ever, we enter in a development that started in the business world and permeating all activities of human life: service. This is something that we doctors learnt in medical schools but never with the emphasis and clarity as in other sectors different to the medical world. The surgeon ´s service attitude should be a brand (Surgeon who left practice - Participant 1).</p> <p>A robot can do a surgical procedure but what is needed is a human being ready to serve. The practice of surgical profession is based on service, from one human being to another one. The need for manual and dexterity competences is just the basics. A trained monkey is able to operate (Active surgeon - Participant 5).</p>
Surgeon ´s image	Surgeon ´s personal body image	<p>In each job one dresses of this job. The surgeon cannot behave or be dressed as a clown. The surgeon must instil confidence. That´s the reason to preserve old styles without break with contemporary issues (Active surgeon - Participant 3).</p>

	Vocation	Inspiration to be a surgeon	The vocation is given by the love for the profession and this element determines the surgeon's efficiency. Nobody does well what does not like (Active surgeon - Participant 6).
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Table 2: Social level of surgeon's identity

Theme 2: Social level of surgeon's professional identity			
General units of meaning (Categories)	Units of relevance	Meaning of unit	Quotations
Professional practice	Change management in professional practice / Law 100	Professional practice before and after the implementation of Law 100 / 1993 in Colombia. The change in the health system is represented by the transition from a public to private and market based health model.	<p>Law 100 forced to regulate equal salaries for everyone. Many surgeons were in trouble. This was the origin of the problem. The professional prestige and social status were lost when surgeons started fighting for pennies. This also leads to the relationship of the doctor with the patient deteriorates (Surgeon who left practice - Participant 2).</p> <p>Law 100 had disadvantages and achievements. The quality of education completely changed. The law changed the professional practice affecting patients and doctors. Doctors before and after Law 100 are different. Before you know what to do for the patient, after the Law 100 a manager tells you what to do. The new doctors fail to understand this because they were born in the system. For them it is difficult to understand what is best for the patient (Active surgeon - Participant 7).</p>
	Landmarks of current surgeon's daily professional practice	Actual characteristics of surgeon's professional daily practice in Colombia in terms of responsibility, institutional commitments and daily work	<p>We are seeing more surgeons are simply workers who fulfil a function and go home after receiving their payment (Active surgeon - Participant 3).</p> <p>Surgeon has a heavy workload and low financial remuneration (Active surgeon - Participant 4).</p>

The surgeon mentality focuses on the economic issues, meet financial obligations. Most surgeons in Colombia think that doing more night and weekend shifts at the hospital, and making more money, they will have a better reputation and prestige. This is false because the only interest is to maintain an economic and financial status for consumption (Surgeon who left practice - Participant 2).

Medicine in our country has become a liberal career and most surgeons are mostly employed. In our society surgeons are considered as an employee of any kind (Active surgeon - Participant 7).

The surgeon is given for anything. The point is that surgeons go to hospital, then they operate on the patient and then they go to another hospital and do the same. Who follows the patient? Perhaps another surgeon who is in the same dynamic. They are becoming technicians, jumping from one hospital to another (Surgeon who left practice - Participant 3).

The surgeon relations with patients and families changed. The surgeon was always there. Nowadays, the available surgeon is who is on call. This is a mercantilist medical world (Surgeon who left practice - Participant 2).

This is a long specialty that implies economic, family and personal efforts. Surgeons during their working lives are linked to an institution that forces them to take night shifts and workload. Therefore, surgeon's families and couples have to be people of great generosity (Active surgeon - Participant 7).

People today have more confidence in the system. Every day matters less the surgeon and more the insurance company. This is a source of depersonalization of medical practice (Active surgeon - Participant 2).

Today professional practice focuses on volume, profitability and takes organs without worrying much for appropriate decisions for patients (Surgeon who left practice - Participant 2).

There are two contradictory aspects. General surgery is the most demanding specialty of medicine. The contradiction is that here in Colombia's compensation surgeon is very bad and is below other specialties because surgeons have left us groping by market rules (Active surgeon - Participant 7).

	<p>Managed care in professional practice</p>	<p>Influences of managed care in surgeon's professional practice</p>	<p>Health institutions in Colombia have a short-term vision. These institutions are not projected to 10 or 15 years, and just want to concentrate on putting out the fires of the day. (Surgeon who left practice - Participant 2).</p> <p>There are a lot barriers that the system puts to patients to lock the access services to health supplies, technology, medical services, continuity of care (Active surgeon - Participant 1)</p> <p>Administrators do not care if there are no blood products available in the hospital, as well as medications and resources, and it's cost the lives of people. This is worse in the public sector (Active surgeon - Participant 1)</p> <p>There is demotivation in the medical practice because assurance system went into the operating theatre to tell the surgeon what suture, equipment and technology is necessary. The insurer system considers the surgical act as a routine act regardless the human dimension of medicine. (Surgeon who left practice - Participant 1).</p>
	<p>Outcome based practice</p>	<p>Changes in the sense of the profession. Transformation from a profession of means into ends.</p>	<p>Surgery is now of a profession of ends. If you have bad results you pass from anonymity into disrepute (Active surgeon - Participant 1).</p> <p>Today is not enough to operate the patient. There are a lot of forces pushing for results. We are changing to ends instead of means in the profession (Active surgeon - Participant 4).</p> <p>Today there are many pressures from hospitals and health systems upon surgeons. These pressures are mainly financial and focused on clinical outcomes and managed care. Today medicine is a subject of ends but not means, and this changes all perspectives (Surgeon who left practice - Participant 3).</p>
<p>Social perceptions / social attributes</p>	<p>Visions of arrogance</p>	<p>Social perception of surgeon's superiority attitude</p>	<p>Surgeons lacked social attributes. We are arrogant, distant people and take defensive positions. We are lonely people with and difficult interaction with the environment (Active surgeon - Participant 2)</p>
	<p>Visions of Surgeon's origin</p>	<p>Historical visions of surgeon's professional origin.</p>	<p>I never introduce myself in society as a doctor but as a surgeon. We have a different origin in from doctors, I was talking with my barber about this aspects in the last days! People see the surgeon as someone able to dig inside. The internist looks the patient and not touch it. The surgeon looks at him inside, and can see the soul (Active surgeon -</p>

		Participant 3).
Demigod visions	Social visions of surgeons as individuals with divine and human attributes	The society perceives the surgeon as a demigod. For the society surgeons are very special persons, very special doctors (Surgeon who left practice - Participant 1).
Visions of economic Status	Social perceptions of economic surgeon 's status	Social growth of the surgeon is very poor. The status is just financial, and there is no morality of professional prestige and reputation. Facing the growing number of programs and the available surgeons, they are working worth less and people give away for nothing. The prestige of surgeons has been lost (Surgeon who left practice - Participant 2).
Visions of family issues	Perceptions of surgeon 's family and surgeon 's relationships	Surgeon families must undergo sacrifice, deprivation and less time. The family perceives him as someone important and admirable. The family appreciates that the surgeon is absent because it has an important social commitment (Active surgeon - Participant 1) I know a case of a surgeon 's wife who left him after he leave the professional practice because she was in love of the surgeon and his attitude. The wife of a surgeon knows the love and passion for the profession. If the environment is stable and the relationship is solid, such decision may be well understood (Active surgeon - Participant 6).
Visions of Institutional prestige	Social prestige perceived by society according to institutions where surgeons work.	If two surgeons do the same, the perception of one is better when he is working in a prestigious institution (Active surgeon - Participant 4).
Visions of Life style	Social visions of surgeon 's lifestyle.	In Colombia something similar happens to the American dream. The medical student thinks that being surgeon he/she will improve his/her status and will have recognition by the society, which does not happen. In developed countries a surgeon is widely recognized. In our country surgeons are doctors like any other, with low payment for their responsibility, work and training (Active surgeon - Participant 7).

Visions of Prestige / reputation	Social visions of surgeon's prestige and reputation	In hospitals who fixes problems? A surgeon of course. When nobody can do anything, they call the surgeon. People see the surgeon as a hope, someone who is operative, and someone who is able to provide solutions. People respect surgeons for this, not only in professional life but also outside (Active surgeon - Participant 9).
Visions of Power	Social visions of surgeon's power	Surgeon is perceived as a powerful person and people feel that they are stealing the surgeon's time. Surgery is the lover who threatens the family stability, so we divorced more. Society sees us as the individuals who solve problems and provide answers. This has to do with the surgeon's personality (Active surgeon - Participant 6).
Visions of Pride	Social perception of surgeons pride	Surgeons are a source of pride, particularly in the province. The society respect surgeon's opinion (Active surgeon - Participant 4).
Visions of Responsibility	Social Visions of Responsibility	I have someone else's life in my hands and the ability to decide (Active surgeon - Participant 2) . The surgeon's wife, girlfriend, or children must know that their father may not be home at weekends, at Christmas or at Mother's Day. When he decided to be a surgeon it almost always required full time dedication, because at any time the phone rings and you have to leave your bed and go to the hospital. If the surgeon's wife understands this marriage works, if not the marriage ends. Sometimes it is necessary to sacrifice the birthdays or any family celebration because one must go. This does not always happen but this usually does not happen to a lawyer or a psychologist (Active surgeon - Participant 10).
Self-perception of social attributes	Surgeon's self-perceptions about the social visions or their own practice	Doctors have lost the high social value that we had some years ago, as well as how valuate ourselves. That reputation is no longer equal. If we solve complex situations we should have a better social position. (Active surgeon - Participant 1). Surgeons have commissioned us to become invisible for the society. The patient no longer knows who operated on him (Active surgeon - Participant 3).
Visions of Surgeon's workload and available time	Social perceptions about surgeon's workload	All specialties see the surgeon as someone who has little time and high workload. The system is oppressive for the surgeon. (Active surgeon - Participant 4).

			Surgeons are misunderstood because the societies see them as someone who has no limits or time. The surgeon has an intense activity and needs to establish timetables and the spaces to overwhelm the pressure of practice. It is a widely held view that the surgeon has no timetable for the professional practice (Active surgeon - Participant 5).
Surgeon-patient relationship	Confidence	Surgeon´s ability to way convey trust and that things are going well	<p>When a patient comes into contact with a surgeon, the surgeon becomes one of the most important people in your life. Then is established a communion based on service It is a bond based on humanity (Active surgeon - Participant 1).</p> <p>Depersonalized mass medicine was terrible for the patient and the doctor because disappeared the sense of belonging in the doctor-patient relationship. Some patients do not remember who their surgeon was, they simply say "a doctor". Before it was like a marriage, one cannot forget the surgeon. Nowadays, the doctor is your insurance company and your hospital (Active surgeon - Participant 3).</p> <p>If the patient has to choose between two surgeons who operate well, he chooses the one with he/she feels better. Then it is essential for the patient is important a good operation and feel good (Active surgeon - Participant 3).</p>
	Deterioration in surgeon-patient relationship	Changes in surgeon-patient relationships influenced by social trends and the health system	We as surgeons rather than have won have lost. One of the most important attributes of old surgeons is that they had good communication skills with patients. They were able to balance their almost divine power and demigod sapience to restore health through operations, removing, extirpating and throw it away the diseased organ, in conjunction with effective communication and abilities to influence positively in the patient. With just talking and explaining the surgeon solved the half of the case. This faded. The day in which the insurance system got into the medical act, the surgeon lost the communication and the relation to make feel the patient comfortable, confident and positive (Surgeon who left practice - Participant 1).
	Quality of care	Ability to practice medicine with high standards, responsibility and ethics.	The concept of surgeon´s quality of care is lost. There are failures in the patient care, because practice is fragmented among different actors in the health system (Surgeon who left practice - Participant 2).

Surgical Education	Humanities in surgical education	Representation of humanities in surgical education	There are many bureaucrats trying to manage the profession. This is a real problem. In fact, what we want as surgeons is to love what we do, but the bureaucrats do not let us. This makes that the surgery is more seen as a technical issue than a profession. There is a crisis in all dimensions. There is a problem of values, the meaning of the profession in the market, and the influence of the media in the general public. The problem has to do also with the lack of humanism. More humanities are required in the curriculum because medical students and residents need more reflection on the fundamentals (Surgeon who left practice - Participant 3).
	Mentoring	Dimension of professional development on a personal level from a deep interaction between teacher and resident	You have to identify in each person the particular needs for personal development. Medical Education must move from a collective process to individual empowerment and support (Active surgeon - Participant 5).
	Role Modelling	Influence of positive and negative role model on surgical education	The role model for the surgery residents is stronger than in other specialties because surgical education is as a concubine relationship between teacher and resident. (Active surgeon - Participant 3). If these are the surgeons I do not want to be like them. There is much negative role model, especially in public hospitals (Active surgeon - Participant 8).
	Selection process	Process conducting to select applicants in surgery residency programs.	Today people are more pragmatic and choose based on quality of life. The decision to make a surgical career is based quality of life and sacrifice (Active surgeon - Participant 4). Medical students perceive surgery as a stressful career where is necessary to spend a lot of time and energy. This affects the life style because surgery requires time, dedication and sacrifice. You have to be on call during twelve of fifteen nights a month in the hospital and this does not appeal to everyone. Consequently people who decide on a surgical career must have resistance abilities because surgery is not a sprint but resistance. (Active surgeon - Participant 9). Selection procedures in surgery residency programs are fragile because subjectivity. We cannot select people based on multiple choice question examinations. We do not realize who can make the cut (Surgeon who left practice - Participant 2).

	<p>Traditional and contemporary issues in surgical education</p>	<p>Balance between contemporary and traditional issues on surgical training</p>	<p>It is important to educate the surgeons for this era but taking up elements of traditional training (Active surgeon - Participant 3).</p>
	<p>Academic versus non-academic surgeons</p>	<p>Scope of academic and non-academic surgeons on lifestyle</p>	<p>Surgeons are differentiated into two groups: academic surgeons and surgeons who will exercise not academically. Exercising surgeons eventually becomes exhausting. In comparison, academic surgeons have a quieter lifestyle (Active surgeon - Participant 7).</p>

Table 3: Decisions to persist or leave professional practice

Theme 3: Causes and consequences to persist or leave the surgical professional practice			
General units of meaning (Categories)	Units of relevance	Meaning of unit	Quotations
Causes	Career`s transition	Changes in professional life across the career	<p>I decided to continue as an active surgeon because I like this life and because I could organize myself better. Now I no longer work in public hospitals or with HMO. Now I only work with prepaid insurance and private patients who pay full fare. I could balance everything, otherwise I pushed gone because it is very difficult to work under difficult conditions as most surgeons exhibit. I was a lucky surgeon (Active surgeon - Participant 9).</p> <p>Gains and losses of the decision depend on the personal motivations of each person as human being (Surgeon who left practice - Participant 2).</p> <p>Leave the profession is not a new phenomenon; this is part of the essence of human beings in the search of better horizons. I not consider it as a problem with a wrong connotation; it is neither good nor bad. Something wrong is bad practice without self-regulation or external control. Those should leave, but many of them are active in practice. But this is another problem... (Active surgeon - Participant 5).</p>
	Defence of professional principles	Ability to put the personal principles to external pressures	Principles don´t have price. Be consistent with oneself gives tranquility and peace (Active surgeon - Participant 1).
	Differentiation of others	The desire not to be one more within the available pool of surgeons	<p>When my colleagues saw on my desk books of economics and math, they told me that I was crazy. They told me you are a surgeon, this is your destiny. But I realized that I should have a differentiating factor and thought about what does not like to surgeons and physicians (Surgeon who left practice - Participant 2).</p> <p>Having an MBA in the surgical environment does not differentiate me from my colleagues. For the system all of us are identical. This is not fair with the surgeon and the institution (Surgeon who left practice - Participant 2).</p>

<p>Economic reimbursement</p>	<p>Economic benefit received by the practice of the profession</p>	<p>Early retirement of surgeons is related to the relation between the amounts of time and responsibility assigned in practice versus the magnitude of the economic remuneration. This relation is negative. If you spend more time or you have more responsibility your income is not necessarily higher (Active surgeon - Participant 5).</p>
<p>Family issues</p>	<p>Family influences to persist or leave the profession</p>	<p>The family is a very important vector for the decision to remain or leave the practice. When one finds the support of family decision is easier (Surgeon who left practice - Participant 2).</p> <p>My profession is exciting and gratifying. Surgery is a passion and a life style, but it is not the only thing that matters to me. There is family, friends and my own welfare. I do not want to spend every moment of my life in a hospital. I want those moments rather than help me to be a better person. It's simple; I want the surgery that allows me to be a better human being. It is something that is part of me (Surgeon who left practice - Participant 3).</p> <p>I had to realise that lost time does not return, that the time that one takes away from children is something scandalous?. Not worth leaving what one loves for dedicating everything to a profession that is just part of life (Surgeon who left practice - Participant 3).</p> <p>One matures with time and a good surgeon is the one who understands the game and not just a part of it. The game involves family, the opportunities to enjoy life, sports, arts and the world. (Surgeon who left practice - Participant 3).</p> <p>My wife realized that my stress was killing me and also was killing her. There is a time when we must break the vicious circle of complaining and do nothing. Or I stay and we will endure life or I go and improve (Surgeon who left practice - Participant 2).</p> <p>The biggest cost for me has to do with time and remuneration. Not to be the owner of my time is very difficult. That time is for my children and my family, not only for patients. Because of this profession, almost I divorced and almost I lost my wife (Active surgeon - Participant 10).</p>
<p>Frustration</p>	<p>Inability to meet professional expectations</p>	<p>To persist without passion and just by economic pressures is very frustrating. This conducts to rancour, laziness and dehumanization. Staying in a system without exit very difficult (Active surgeon - Participant 1).</p>
<p>Health System Pressure</p>	<p>Pressures from the health system to leave the profession</p>	<p>I lived the decision to stop being surgeon three years ago, because the health system did not allow me to be the kind of</p>

		doctor who learned to be. That's very frustrating because administrative and financial pressures do not allow work quietly- (Surgeon who left practice - Participant 3).
Lack of vocation and conviction	Lack of inspiration for the profession	The surgeon who keeps it done for two reasons: vocational motivation where is very common taking tasks that others would not, or because they got into a path which they cannot escape because they did not learn anything else to do. In the last case there is not conviction (Active surgeon - Participant 2).
Legal issues	Legal influences to leave the professional practice	The stability of income and not be exposed to legal risks is a vector for any decision (leave or remain in practice) (Surgeon who left practice - Participant 2).
Life style	Negative Life style issues influencing to leave the professional practice	I did not want to be as my teachers taking night shifts in the hospital until the age of 50 years old (Surgeon who left practice - Participant 2).
Routine of surgical practice	Practice of profession by habit, losing the possibility of new horizons	<p>I experienced it of first-hand. The problem is the routine of surgical practice and the lack of innovation in daily work. Even surgery is an art, when art becomes routine this process conduces to practitioner boring (Surgeon who left practice - Participant 1).</p> <p>Surgeons tend to be little risk averse. We like to stay in a hospital but we do not like and frightens us to expose ourselves to other work settings. This is different for managers, economists and engineers who they are more risky. The surgeon likes more the comfort zone that is the operating room (Surgeon who left practice - Participant 2).</p> <p>If one can realize that the best is the surgery after a time one returns. But it is clear that surgeons do not want to change (Surgeon who left practice - Participant 3).</p>
Social and economic pressures	Social and economic influences to persist or leave the profession	Some surgeons continue in practice due habits and routine, or by pressures from family or economic issues. We have to look each case particularly (Active surgeon - Participant 3).
Vocation / vocational liability / inability to sacrifice	Lack of the source of inspiration to continue being a surgeon or inability to sacrifice.	The young surgeons have many idealists, often romantic. These surgeons realises of hard realities, not only with patients but the exercise of the profession, colleagues, surgical environment as well as the institution in general.

			They make an inventory of what they thought and may have two options: face and try to be consistent based on vocation, or otherwise leave, because vocational liability and inability to sacrifice (Active surgeon - Participant 3).
	Wrong choices	Remain or leave in the profession due to wrong selection of the surgical specialty.	After ten years operating between 200-400 patients per year you are a mature surgeon, you know the surgical science and you have afraid of complications. After these years normally you choose a more specialized branch. Before that period if you choose a different path, the surgical specialty was probably a wrong decision (Active surgeon - Participant 4).
Consequences	Normative visions from society	Society visions of the decision to persists or leave the professional practice	<p>In general, what is socially acceptable is not necessarily morally appropriate. The decision to remain or leave practice is free (Active surgeon - Participant 5).</p> <p>Society has a need to make judgments, which should we care little because remain or leave the profession is part of the free development of personality (Active surgeon - Participant 5).</p>
	Gains and losses from the decision to persist or leave the practice	Positive and negative consequences of remain or leave the professional practice	<p>The main advantage of surgeons in other work settings is how they interact with people. The relevance of the patient for the profession makes a difference. In the corporative world other attributes are very important in terms of effectiveness and financial issues. But the surgeon ethics is very important and the patient becomes more robust this concept. In the corporate world it is very easy to fall. Medicine strengthens people in principles. In addition, another advantage is that surgeons has been a client of the corporate world and understands the needs of the market in simple words, more easily reach out to the customer (Surgeon who left practice - Participant 2).</p> <p>Surgeons who leave the professional practice usually win freedom, reflexion, maturity and comfort. This is because surgery is not the motivation (Active surgeon - Participant 6).</p> <p>Most surgeons who leave the professional practice are most successful in terms of quality of life and money (Active surgeon - Participant 7).</p> <p>Considering what I am as surgeon, I feel confident to do whatever. I feel able to do many things, even those never imagined. Being a surgeon, and taking into account my experience during practice, enables me to move well in other scenarios (Surgeon who left practice - Participant 3).</p>

		<p>I won, especially because I am now relaxed, without much pressure and eagerness (Surgeon who left practice - Participant 3).</p>
<p>Moments of decision</p>	<p>Moments when appear critical decisions to remain or leave the professional practice across the professional life</p>	<p>The growth as a surgeon during the early stage of the career is focused on economic stability and recognition. The difficult decisions to persist or leave the professional practice appear when you stop to enjoy surgery and is no longer pleasurable, when there are unexpected deaths of patients, because this leads to a strong shock and personal judgement, and finally when you see that the person feels that he is leaving other dimensions of life. In particular the latter reason is very important because you realize that surgery is not all (Active surgeon - Participant 6).</p> <p>The first time is when the surgeon faces the decision to leave the profession is in early stages, when he realizes that the sacrifice exceeds the revenue. The second moment is when complications arise when one feels like himself as a villain. The third is when demands appear and the fourth when you start to reflect on what life is and whether it is thinking keep doing this (Active surgeon - Participant 2).</p>

Table 4: Surgeon's identity after leaving professional practice

Theme 4: Surgeon´s identity after leaving professional practice

General units of meaning (Categories)	Meaning of Unit	Quotations
<p align="center">Conservation of surgeon´s attributes (personal and social) after leaving professional practice</p>	<p align="center">Magnitude of the conservation of the personal or social attributes after leaving the specialty</p>	<p>As people we take decision all the time. However how we decide is cultivated in time. Surgeons have a gift for decision. This never misses. Someone may stop operating but the basic skills of decision there still across the life (Surgeon who left practice - Participant 2).</p> <p>Personal attributes are not lost. The surgeon is done on a personal basis that makes it easier or harder. It is possible that will serve to practice other offices where needed decide as in politics or the army. Surgery maintains those personal qualities in a permanent exercise (Active surgeon - Participant 2).</p> <p>Surgery is a lifestyle so you never stop being a surgeon, maybe you can stop to operate (Active surgeon - Participant 4).</p> <p>People who leave the practice will continue to have an attitude of surgeon, in terms of leadership and problem solving. The attitude is never lost (Active surgeon - Participant 6).</p> <p>A person who is a really good surgeon has some attributes in his/her soul. This will never lost (Active surgeon - Participant 7).</p> <p>The person never changes. People, who want to be surgeons because they feel they have something that allows them to do it, if someday decide to leave the profession continue being the same person, with the same virtues and defects which can serve to do something else. But surgery as a profession is the core of knowledge and art that just can be learned by exceptional people. Someone with the abilities to be a surgeon does not lose his traits when stopping practice. He maybe changes his profession but he never changes what he is. The surgery brings him to be a better person (Active surgeon - Participant 9).</p> <p>I'm still a surgeon. I am no longer in the operating theatre as many others, but I behave and I feel like a surgeon. (Surgeon who left practice - Participant 3).</p> <p>Surgery is not only the operating theatre. The operating theatre is a very important element of but it is not everything (Active surgeon - Participant 3).</p> <p>Surgeons who decide to leave the practice will serve in another dimension. The essence remains the same. The essence does not change, because this is the essence of the person. The profession is the instrument to serve (Active surgeon - Participant 5).</p>

<p>Loss of surgeon´s attributes after leaving professional practice</p>	<p>Magnitude of the loss of the personal or social attributes after leaving the specialty</p>	<p>The professional identity can be lost because one requires daily encouragement, even more in this ephemeral world. The identity is managed and cultivated daily is not like riding a bicycle. (Active surgeon - Participant 6).</p>
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Table 5: Quantitative data analysis: categorisation

<p>Table 5. Quantitative Data Analysis: categorisation</p>				
<p>Themes</p>	<p>General units of</p>	<p>Units of relevance</p>	<p>Active surgeons</p>	<p>Surgeons who left professional practice</p>

	meaning (Categories)		1	2	3	4	5	6	7	8	9	10	n	%	1	2	3	n	%	
Individual level of surgeon`s identity	Personal attributes	Commitment	1	1	1	1	1	1	1	1	1	1	8	80	1	1	1	3	100	
		Communication skills	1	1	1	1	1	1	1	1	1	1	1	7	70	1	1	1	2	67
		Comprehensiveness	1	1	1	1	1	1	1	1	1	1	1	4	40	1	1	1	2	67
		Dedication and prudence	1	1	1	1	1	1	1	1	1	1	1	9	90	1	1	1	2	67
		Executive skills	1	1	1	1	1	1	1	1	1	1	1	7	70	1	1	1	1	33
		Heroism	1	1	1	1	1	1	1	1	1	1	1	3	30	1	1	1	1	33
		Humanism	1	1	1	1	1	1	1	1	1	1	1	6	60	1	1	1	1	33
		Innate or acquired skills	1	1	1	1	1	1	1	1	1	1	1	2	20	1	1	1	0	0
		Interpersonal relationships	1	1	1	1	1	1	1	1	1	1	1	5	50	1	1	1	1	33
		Leadership	1	1	1	1	1	1	1	1	1	1	1	10	100	1	1	1	3	100
		Life style	1	1	1	1	1	1	1	1	1	1	1	8	80	1	1	1	1	33
		Manual dexterity	1	1	1	1	1	1	1	1	1	1	1	10	100	1	1	1	0	0
		Optimism / trust	1	1	1	1	1	1	1	1	1	1	1	5	50	1	1	1	1	33
		Passion	1	1	1	1	1	1	1	1	1	1	1	6	60	1	1	1	1	33
		Physical attributes	1	1	1	1	1	1	1	1	1	1	1	3	30	1	1	1	1	33
		Problem solving	1	1	1	1	1	1	1	1	1	1	1	5	50	1	1	1	2	67
		Prudence	1	1	1	1	1	1	1	1	1	1	1	5	50	1	1	1	1	33
		Resiliency	1	1	1	1	1	1	1	1	1	1	1	4	40	1	1	1	1	33
		Sacrifice	1	1	1	1	1	1	1	1	1	1	1	9	90	1	1	1	2	67
		Scientific knowledge	1	1	1	1	1	1	1	1	1	1	1	9	90	1	1	1	2	67
Sensitivity and compassion	1	1	1	1	1	1	1	1	1	1	1	6	60	1	1	1	2	67		
Service	1	1	1	1	1	1	1	1	1	1	1	8	80	1	1	1	2	67		
Surgeon`s image	1	1	1	1	1	1	1	1	1	1	1	2	20	1	1	1	0	0		
Vocation	1	1	1	1	1	1	1	1	1	1	1	8	80	1	1	1	2	67		
Social level of surgeon`s	Issues in current professional	Change management in professional practice / Law	1	1	1	1	1	1	1	1	1	1	8	80	1	1	1	3	100	

identity	practice	100																	
		Landmarks of current surgeon's daily professional practice	1	1	1		1	1	1	1	1	8	80	1	1	1	3	100	
		Managed care in professional practice	1	1	1	1	1	1	1	1	1	1	10	100	1	1	1	3	100
		Outcome based practice	1	1	1	1	1		1	1		1	8	80	1	1	1	3	100
	Social visions of surgeon's professional practice	Visions of arrogance				1			1		1	1	4	40	1		1		33
		Visions of Surgeon's origin	1		1		1	1		1	1	6	60			0		0	
		Demigod visions	1					1		1		3	30	1		1	2	67	
		Visions of economic Status	1	1	1	1	1	1	1	1	1	10	100	1	1	1	3	100	
		Visions of Family issues	1	1	1	1	1	1	1	1		9	90	1	1	1	3	100	
		Visions of Institutional prestige	1	1				1	1	1	1	6	60	1		1	2	67	
		Visions of Life style	1	1	1	1	1		1	1	1	9	90	1	1		2	67	
		Visions of Perstige / reputation	1	1	1	1	1	1	1	1	1	10	100	1	1	1	3	100	
		Visions of Power	1	1	1	1		1	1	1	1	8	80	1		1	2	67	
		Visions of Pride	1	1		1						4	40	1			1	33	
		Surgeon's Self-perception	1	1	1	1	1	1	1	1	1	9	90	1	1	1	3	100	
Visions of Responsibility		1	1	1	1		1	1	1		7	70	1	1		2	67		
Visions of Surgeon's workload and available time	1	1	1	1	1	1	1	1		8	80		1	1	2	67			
Issues in Surgeon-patient relationship	Confidence	1	1	1	1	1	1	1	1	1	9	90	1	1	1	3	100		
	Deterioration in surgeon-patient relationship	1	1	1	1	1	1	1		1	9	90	1	1	1	3	100		
	Quality of care	1	1	1	1		1	1	1	1	8	80	1	1	1	3	100		

	Issues in Surgical Education	Humanities in surgical education	1	1				1	4	40	1	1	1	3	100			
		Mentoring	1	1			1	1		4	40	1		2	67			
		Role modelling	1	1		1	1		1	1	6	60	1	1	2	67		
		Selection process	1	1	1	1	1		1	1	7	70	1	1	1	3	100	
		Traditional and contemporary issues in surgical education	1		1	1		1	1	1	6	60	1	1	1	3	100	
		Academic versus non-academic surgeons	1		1	1	1			1	5	50	1	1	1	3	100	
Decision to remain or leave the professional practice	Causes	Career`s transition	1	1			1	1		4	40	1		2	67			
		Defence of professional principles		1			1			1	3	30	1	1	1	3	100	
		Differentiation of others	1		1	1			1	1	5	50	1	1		2	67	
		Economic reimbursement	1		1	1	1				4	40	1			1	33	
		Family issues	1	1		1	1	1	1	1	1	9	90		1		1	33
		Frustration	1	1		1	1	1				5	50		1		1	33
		Health System Pressure	1	1	1	1	1	1	1	1	1	9	90	1	1		2	67
		Lack of vocation and conviction	1	1					1	1		4	40		1		1	33
		Legal issues	1		1		1	1				4	40		1		1	33
		Life style	1	1	1		1	1		1	1	7	70	1	1	1	3	100
		Routine in surgical practice	1	1	1	1	1	1	1	1	1	8	80	1	1		2	67
		Social and economic pressures	1	1		1	1			1		5	50				0	0
		Vocation / vocational lability / inability to sacrifice	1	1						1		3	30		1		1	33
	Wrong choices					1					1	10				0	0	
	Consequences	Normative visions from society		1	1		1	1		5	50				0	0		

	Gains and loses of the decision	1	1	1	1	1	1	1	1	1	1	10	100	1	1	1	3	100
	Moments of decision				1	1	1		1	1		5	50	1	1	1	3	100
	Conservation of surgeon's attributes (personal and social) after leaving professional practice	1	1	1	1	1	1	1	1	1	1	9	90	1	1	1	3	100
	Loss of surgeon's attributes after leaving professional practice	1										1	10			0	0	