

Simüle Hastalar: Onları ne Motive Eder ve İhtiyaçları Nelerdir?

Volunteer simulated patients: what does motivate them and what are their needs?

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ABSTRACT:

Background and aims: *Revealing the motivational drives and psychological needs of voluntary simulated patients, especially in institutions where resources are deficient, could help to promote a sustainable reserve without a need for remuneration. We aimed to explore the reasons why simulated patients participate in simulated education voluntarily using the concept of Basic Human Needs Theory.*

Anahtar Kelimeler

Simüle hasta,
standardize hasta, tıp
eğitimi, Maslow,
ihtiyaç belirleme

Keywords:

Simulated patient,
standardized patient,
medical education,
Maslow, needs assessment

Material and methods: *We chose a qualitative method, in which in-depth interviews were performed with nine simulated patients. Interviews were recorded and analyzed according to the principles of content analysis. We suggest Maslow's Hierarchy of Needs as a conceptual framework for understanding what makes simulated patients contribute voluntarily in medical education.*

Results: *We identified that simulated patients are anxious about genital examination, enjoy being part of a group, feel responsible for educating medical students, appreciate to be needed and accepted and worry about*

good performance.

Conclusions: *We present findings from a theory-driven evaluation of volunteer simulated patients' needs. The question how to satisfy the needs of volunteer simulated patients may be answered by applying the basic human needs model which offers a means for understanding these encounters in terms of global individual needs. To make the simulated patient feel safe, needed and valued could possibly result in happiness and enhanced motivation and provide sustainability of participation.*

Amaç: Kaynakların kısıtlı olduğu kurumlarda gönüllü simüle hastaların çalışma nedenlerinin ve

psikolojik ihtiyaçlarının belirlenmesi, bu grubun ücretsiz olarak desteğini sürdürmek açısından faydalı olabilir. Bu çalışmada, Temel İnsan İhtiyaç Teorisini kullanarak, simüle hastaların neden gönüllü olarak simülasyon eğitimine katıldıklarını araştırmayı amaçladık.

Gereç ve yöntem: Kalitatif araştırma yöntemi kullanarak dokuz simüle hasta ile derinlemesine görüşme yaptık. Görüşmeler içerik analizi ilkelerine göre kayıt altına alındı ve analiz edildi. Simüle hastaların tıp eğitimine neden gönüllü olarak destek verdiklerini anlamak için Maslow'un İhtiyaçlar Hiyerarşisi kuramsal çerçeve olarak kullanıldı.

Bulgular: Bu çalışmada simüle hastaların genital muayeneden çekindiklerini, bir gruba ait olmayı sevindiklerini, tıp öğrencilerinin eğitiminden sorumluluk duyduklarını, ihtiyaç duyulmayı ve kabul edilmeyi takdir ettiklerini ve iyi performans kaygısı taşıdıklarını saptadık.

Sonuç: Bu çalışmada gönüllü simüle hastaların ihtiyaçları ile ilgili teoriye dayalı bulgular sunulmuştur. Gönüllü simüle hastaların ihtiyaçlarını nasıl karşılarız sorusu evrensel bireysel ihtiyaçların karşılanmasını açıklayan Temel İnsan İhtiyaç Modelinin uygulanması ile cevaplanabilir. Simüle hastalar açısından kendini güvende hissetmek, ihtiyaç duyulduğunu ve değer verildiğini görmek, onların mutlu olmaları sağlayarak çalışma isteklerini artırabilir ve desteklerinin sürmesi sağlayabilir.

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Introduction

The use of simulation in health care is increasing in many medical schools throughout the world, and the contribution of simulated patients (SPs) has been defined as a reliable and valuable teaching and assessment tool (1-3).

The advantages of SPs are that they are available as and when required and they have been found to be more effective than class lessons for learning consultation skills. The main disadvantage of involving SPs is the need for financial resources for their fee. SPs are involved in education in several European medical schools but who is chosen as a SP differs. There are different types of simulated patients such as laypeople or volunteer patients, and professional actors who are paid (4). While some medical schools choose only professional actors, others work with volunteers. Also, paying for non-professional volunteer SPs or the amount being paid differs from school to school. Although payment is reported to be an appealing factor for SPs, if the payment is low, it includes the risk of a message of low value on their contribution (5).

Probably, most schools are guided by their resources in deciding to involve paid professional actors as SPs. It is important to study SPs' reasons for participation because simulated medical education is largely dependent upon their willingness and motivational drive in schools with limited resources where SP services rely heavily on volunteerism. In addition, researchers have suggested that exploring the psychological needs of SPs may contribute to increasing their quality (6) and called for more research in this area (7).

To explore volunteer SPs' reasons to participate and maintain participation, we have found that Maslow's Hierarchy of Needs offers a useful conceptual framework (8). The associated

publications show that Maslow's theory has been adjusted effectively to hospice and palliative care and adapted successfully to patient care and education (9,10). Maslow's theory classifies several universal requirements for human growth and development, and it theorizes that certain needs take superiority over others. Physiological needs (e.g., food and water), for example, are essential to sustain the human body. When these most central needs have been mostly satisfied, safety needs controls individuals' rational and behaviors as they pursuit for a safe, organized, and predictable world. Then, human beings highlight their needs for love, affection, and belonging. With this aim, they dynamically join in relationships with friends and family members. Next, individuals try to satisfy self-esteem needs such as the need for self-respect (internal esteem) and the respect of others (external esteem). There is no single ideal model of motivation and Maslow's theory, and like any other, it has received both support and opposition. The power of Maslow's theory largely arises from its applicable explanation of human motivation. The hierarchy of basic needs appears to be the best theory to outline human motivation and that explains how employee motivation, behaviour, and attitudes are related to basic human needs and desires (11,12). We believe that our qualitative approach exploring volunteer SPs' needs will benefit effectively from Maslow's theory and it will help us to observe the extent to which our faculty efforts and services meet SPs' physiological, safety, love and belonging, and self-esteem needs. Our study was guided by this research question: What are the reasons for SPs to choose to participate voluntarily in medical education?

Material and methods

Context

Several Turkish medical schools have introduced simulation into their medical education programs. The Medical School of Pamukkale University in Denizli, Turkey, has followed this trend recently, and a group of SPs was created with this purpose. There are 160 to 340 students in each of the three preclinical years. The new SP program at the Pamukkale Medical School has academic leadership and technical and administrative support. The program is sufficiently connected with the clinical skills curriculum subject, and the leads are responsible for the training and assessment of the SPs. Staff interested with the SP program - administrators, educators, clinicians and academics - share responsibility for SP role development and curriculum design. The school has facilities to provide teaching and learning in a simulated environment, as well as opportunities for audio-visual assessment.

In the beginning, the criteria for recruitment were that SPs needed to be interested, reliable and, most importantly, being volunteers. Firstly, members from a group of amateur theatre actors performing short plays for sick children agreed to participate. After a general invitation, 15 persons agreed to be included in the SP database. Via personal referrals, the number increased to 25 volunteer SPs who are contacted when a meeting is planned.

The program includes training sessions for SPs that outlines the expectations of the SPs, the learning goals for the trainees, the schedule, and opportunities to review and rehearse roles. Reviews of audio-visual recordings are used to offer supervision to the SPs regarding the desired format and method. In addition, SP performance is evaluated by the faculty through brief written

assessments that provide references to areas of concern.

Design

We used grounded theory methodology, in which in-depth interviews with SPs were performed. We preferred a qualitative approach because qualitative assessment is much more effective to discover peoples' needs, to investigate the people's desires, and to assess Maslow's concepts (13,14).

Study population and recruitment

All SPs who had performed at least one patient role were invited to participate in the interviews in person by the first author with the aim to comprise a purposive sample (15) and 14 out of 25 SPs accepted to participate in the interviews. Sample size was fixed by the research question (16), meaning the content of the interviews was accepted as saturated when no new information was acquired and nothing new was being added to the details already triggered during previous interviews with a final sample of nine SPs. This sample size was accepted reasonable for qualitative research. The reasons given why other SPs did not agree to participate were lack of time and being not familiar with interviews. The mean age of these non-participants was 28, most of them were amateur acting, and they had similar job descriptions.

Ethical considerations

This study was approved by the Ethical Committee of Pamukkale University Medical Faculty. We informed the SPs about the aim of the study, possible risks, and measures for guaranteeing anonymity. Before each interview, we asked for verbal consent for the interview to be recorded. SPs were told that they could stop and end the interview at any time without any

fear of being penalized. It was clarified that all kinds of opinions and thoughts were welcome and that there were no correct or incorrect answers. Consent was obtained from all participants, and everyone agreed to the request to keep the interviews confidential.

Data collection

Data collection was accomplished using face-to-face, in-depth interviews of participants between 1 November and 31 December 2014. Two of the researchers (TE and SO) conducted the interviews. Each interview was performed by one single researcher alone and every researcher conducted 4-5 interviews, which lasted 40-60 minutes held in the tutorial meeting room at the medical school. The interviews were audio recorded, and the contents were transcribed verbatim. Spot examination of transcripts was performed in order to confirm their accurateness (17).

The main interview question in this study was: "Why do you participate voluntarily in this simulation program?" Additional branching/probing questions were: "Do you enjoy being a SP and why?" "Do you intent to continue to support this program voluntarily and why?" Additional questions were directed to obtain more in depth details, resulting in ten questions in total. The participants were stimulated to respond in an informal way.

Data Analysis

Data analysis was performed in a continuing and progressive way which started during data collecting. In this study, we used qualitative content analysis to recognize SPS's understanding of voluntarily teaching and to understand the level to which our faculty efforts and services meet SPs' physiological, safety, love and belonging, and self-esteem

needs. Qualitative content analysis is a study method used for the subjective explanation of written data through the procedure of coding and the identification of themes. It is a flexible and practical research technique for conducting qualitative studies without any philosophical beliefs, using a specific qualitative research method (18). The aim of content analysis is to deliver knowledge and understanding of the matter being studied.

As we adapt a huge amount of expressed opinions into reduced sets, the analysis of participants' experiences is typically reductive in nature. Therefore, this qualitative, descriptive, and interpretative study used manifest and latent content analysis to find out SPs' perceptions on voluntary labor (19,20). In the first step, we read through the interviews and listened to them a number of times to attain a sense of the complete data and to become acquainted with the individual interviews. We coded the transcripts by identifying passages, or "units of meaning", that exemplified SPs' opinions about voluntary participation. NVivo 9.0 (QSR International Pty Ltd, Doncaster, Vic, Australia) software was used to attach each meaning unit to a named "node" representing an idea or perception shared by the units. We extracted 245 significant meaning units from the nine transcripts during the coding and associated them with 13 nodes. We tried to exclude those passages in which the perception was not characteristic. Then, we evaluated the transcripts with an attempt to identify the themes evolving from the nodes. The categories were discussed until agreement was reached. Two family medicine residents studied on the transcription of the collected interview data, while the authors confirmed the transcription subjects in the text. We ascribed the codes (e.g. no genital examination, I am valued, they need me) to meaningful text components.

After coding several interviews in this inductive mode, the emerging code list was discussed and the codes were matched with the content of the interview transcripts. To approve reliability of the coding method, several interviews were coded individually by the first and third author by using the same emerging code list, which exposed an agreement of 83% of coded items. Disagreement happened when a comment could be fitted into more than one category. However, we deemed this 83% to represent an acceptable level of agreement. Each problem was discussed and the codes were clustered together and we explored for themes among them. Relevant quotations were chosen to illustrate these themes.

Study rigor

To construct the rigor of this study, we considered the reliability, auditability and confirmability (21) of each patient's interview. We showed the results to the participants to verify the explanation of their understandings.

Results

The age distribution of the participants was as follows: four were 25 to 29 years old and five were 30 to 36 years old. Five were female and four male with a group age average of 27 years. The majority (78 %) was involved in amateur acting and of SPs reported more than 4 hours of simulation sessions per week (Table 1).

Table 1. Characteristics of simulation patients participated in in-depth interviews at Pamukkale University, Turkey, 2014

No	Sex	Age	Job	Amateur Acting
SP 1	Female	25	Teacher	+
SP 2	Female	26	Housewife	+
SP 3	Female	28	Waitress	+
SP 4	Female	33	Social worker	+
SP 5	Female	36	Nurse	+
SP 6	Male	29	Human resources manager	+
SP 7	Male	30	Tax preparer	-
SP 8	Male	30	Veterinarian	+
SP 9	Male	32	Financial specialist	-

SP: simulated patient

Five main themes were identified; anxiety about physical examination, enjoying group membership, feeling responsible for educating medical students, appreciation of being needed and worrying about good performance (Table 2). No difference according to SP type or demographics was observed.

Table 2. SPs distribution in code, sub-theme and theme

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SPs	Code	Sub-theme	Theme
<i>SP1, SP2, SP3, SP4, SP5, SP6, SP8</i>	No genital examination So many students	Fear of taking off clothes Fear of genital examination Fear of number of examinations	Anxiety about physical examination
<i>SP1, SP2, SP3, SP4, SP6, SP7, SP8</i>	We all have fun Training is useful	Enjoy group participation Have fun in training hours	Enjoying being member of a group
<i>SP2, SP3, SP4, SP6, SP7, SP9</i>		Supporting training for good doctors Knowing the lacks in medical education Understanding medical students	Feeling responsible for educating medical students
<i>SP1, SP2, SP3, SP5, SP9</i>	I am valued Students like us Students find us useful Faculty is always grateful They need me	Feeling needed Social value of their contribution Positive feed-backs	Appreciation of being needed
<i>SP1, SP3, SP4, SP5, SP7, SP8, SP9</i>	I can handle simple cases I need training for psychiatric cases I want to be prepared	Assessing own performance Training is necessary and supportive Represent "real" patients Ensure a good role-play	Worrying about good performance

We discovered that Turkish SPs have no perceived safety problems in taking part in communication skills education but do feel very insecure in the zone of the planned physical examination sessions. Allowing for examination of the genital organs was the critical point.

“Talking with the students as a patient and answering their questions is ok. Also, I could take off my shirt, allow heart and lung auscultation but would not allow prostate examination. They (students) should learn this on real patients.” (SP7, M)

“Conversation with the students are useful. But, I'd never take off my clothes for this job. It's in contradiction with my view of living. Maybe, I can allow female students to listen to my heart sounds but not to touch my breasts.” (SP1, F)

“I could allow for breast examination in a breast cancer case, because I know how important that is, but (sighs...) there are so many students.” (SP2, F)

SPs said having fun, both in meeting with each other and in the simulation sessions itself. Working as a group with other SPs and experiencing similar feelings and discussing these feelings with them was a way to realize that they belong to a group of educators.

“It's nice to work together with people whose aims are similar to mine. I feel happy to be in this group of SPs. To me, we are a group of teachers and this makes me feel useful.” (SP1, F)

“We know each other better because we meet and talk about our experiences after the sessions. All group members are having fun in this project. And the training is helping us very much, too.” (SP6, M)

They understand that interactions with real patients may be more instructive but they know that students learn different things from SPs, especially communication skills. SPs indicated

that knowing the challenges students face provides a strong motivational support for doing this job. SPs were aware of their contribution to the education of students.

“Students don't know how to act in front of a patient, you're nervous and don't know what to ask or say. I think it's very useful for the students to have practiced with me, it helps them when they see a real patient to feel more self-assured.” (SP4, F)

“Communication is very important in medicine. You need to understand the students' needs, and help them to prepare themselves for real patient encounters. That's what I am doing as an SP; I help them (students) to become good doctors.” (SP6, M)

“These students will be tomorrow's doctors, and they will maybe examine you (or me...). Therefore, to aid in their education makes me feel more safe and motivated.” (SP6, M)

“Sometimes you see a student who knows very little and makes quite a few mistakes and then you see him again and he is doing a lot better and that motivates me more to be an SP.” (SP7, M)

All SPs stated to enjoy their work and shared that it's a largely positive experience being an SP. This was the crucial condition to do this job. Feedbacks from the students describing the benefits of the simulation program were mostly welcomed by the SPs. Also, feedbacks from the faculty were welcomed although challenging sometimes. They commented many times about the meaning of the social importance of their work.

“To hear that students find us useful makes me happy and I feel that I am doing a good job. That is true for the faculty, too. They really care about us and our work.” (SP9, M)

“Honestly, I do it because I feel that I am valued by the faculty and by the students. Money is

not that important. I feel that what I do is a contribution. I know that I am needed.” (SP2, F)
“I like to think that I am influencing the medical profession in a way and do something beneficial for the students who will be tomorrow’s doctors.” (SP3, F)

To represent “real” patients adequately, SPs accepted that a good performance in role-playing is necessary. Putting their selves in the patients’ shoes was a way they choose to ensure a good role-play. In addition, training sessions before the simulations were found to be beneficial in performing a case appropriately.

“If the case is not complicated, training in acting is not necessary, but if you have to simulate a psychiatric case or an angry patient, training does help. I like to be prepared before I join a session.” (SP4, F)

“I feel that every consultation is a test for how well you can role-play. I pretend to be the patient and try to ignore that’s only a student and imagine I am talking to a real doctor. ” (SP5, F)

Other SPs were concerned to guarantee their performance was standardized because questions from students could be unpredictable and the required affect and feeling to be displayed within the case could be difficult to do in practice. Trying to keep the characters standardized and reacting to individual variations in the simulation was a challenge that they constantly tried to achieve.

“Being a SP is not easy, believe me. Sometimes I realize that when I give an altered bodily reaction to a student, that can lead to a path where the students misses his target. You have to be careful with your reactions.” (SP8, M)

“At the end of the day, after the sessions, I evaluate my performance and try to remember what I did wrong. Students can be surprising, and when you not focus on your role, you

can easily dismiss the required role playing. Training helps a lot.” (SP5, F)

“We were acting as amateurs (theatre) before, but, simulation is much more challenging, I think. The training with the faculty did help me to improve myself in acting and in finding myself. I like to be an actress and I am happy to be here.” (SP3, F)

Discussion

Participation of SPs in medical education on a voluntary basis forces us to recognize and satisfy the needs of them in order to sustain continuity. In this study, we used the basic human needs model of Maslow for understanding these tasks in terms of universal individual needs. Maslow’s model has been used in the work place with the aim to discover human motivations using the same five stages, but the descriptions were modified by himself and several authors (22,23). According to these descriptions, the first basic stage that must be satisfied is that of safety, e.g. salaries. With satisfactory earnings, the individual pursues safety on the job including physical and mental safety. As our SPs’ participation in simulation was on a voluntary basis, concerns about adequate salary were inappropriate, but safety issues were addressed in issues concerning examination of the genitalia. Although SPs are taking part in breast and genitourinary examination skills training in the European and North American medical schools (6,24), we were not able to find data about sexual health training with SPs from the eastern world. Our volunteer SPs declared that they are not willing to accept whole-body examination sessions. Moreover, female SPs were not ready to allow any examination of their genital organs. Many SPs may be uncomfortable talking about sexuality with students, especially in conservative societies. Nevertheless, a

large number of medical students may be uncomfortable talking about sexuality with their patients and improved communication skills in conversations about sexuality after simulation based interventions are reported (25). Students consider SPs very beneficial to practice physical examinations, especially in learning “intimate” examinations, such as gynaecological and breast examination (26,27). Students need to learn to carry out a gynaecological examination in a sensitive and competent manner, whether they are to become primary care physicians, surgeons, other physicians or gynecologists. A simulated practicum would allow students to gain practice in a safe environment. However, most of our SPs pointed out that they would feel insecure if they would have to answer questions about intimate health problems, but this would be more acceptable, in comparison with genital examination. We have not discussed the reasons for this way of thinking but we believe that their concern is not related to reimbursement issues. Further research may help to identify the most effective ways of persuading SPs in participating in sexual health problem simulating sessions, especially in countries with conservative social structure.

According to Maslow, once security is assured, the individual moves to the next stage seeking social belongingness in the workplace, pursuing enjoyable working relations with others and finding a place in work related and social groups. The reasons for volunteer SPs to join in such a new and different work group may simply be explained by belongingness needs. In general, belongingness needs include desires to be a member of a group, or a social, religious, or political gathering, in order to experience collective consciousness and feelings of social acceptance and identification. Money was not viewed as an important aspect of SPs’

motivation, instead, the sense of being valued by the faculty and students and the perceived value of their work to others was indicated as a major cause for feeling greeted and protected.

Our SPs raised concerns about responsibility of being involved in teaching tomorrow doctors and a desire for contributing to medical education. They enjoyed the training sessions and identified the friendly and supportive communication with the faculty. Self-esteem in the workplace is built on the individual’s effective performance judgements, inspirations, rewards received and appreciations obtained. Maslow distinguished two types of esteem needs: self-esteem and social esteem. Self-esteem needs include desire for achievement, competence, confidence and freedom. Social esteem needs encompass desires for respect from other people, reputation, recognition and appreciation. Member decisions, ideas and worries should be recognized in order to achieve involvement in organizations. Otherwise, the member feels misunderstood and unappreciated and their self-esteem diminishes. As it is highlighted in *The Maslow Business Reader*, individuals dislike being misunderstood, unappreciated and not respected (22). Taking part in medical education displayed a positive effect on self-esteem needs of our SPs. They typically commented that these activities helped to establish some sense of value, productivity, and control. The training sessions encouraged interactions among SPs and faculty members.

The SPs cited of supporting students and the medical education in means of working for a larger purpose which creates happiness and meaning. They realized to become involved with the betterment of the larger community and, in fact, they did it for free. We know that this is why volunteer activities, caring for members of your family or supporting a charity, all feel

so good (28,29). Our SPs desire the feeling that they matter and that what they do matters, while pursuing a continuing experience. They feel connected to others and feel special through being engaged in meaningful activities and experience happiness (30). It is suggested that SPs should either be paid appropriately or be invited in a volunteer program where motivation is based merely on their desire to contribute to the education of physicians which is sustained by learning new skills, meeting new people, having enjoyment and feeling valued (31). Our SPs may have experienced happiness or self-actualization during or after the sessions, in the occasional moments when they can get a glimpse of reality (32). We believe that this concept helps to explain the altruism we found in this study.

Limitations

Our study is limited by the fact that this study is restricted to the perceptions of a group SPs at one medical school. Despite the focus on one medical school in the current study, the factors identified are not unique to this location and are therefore likely to be useful in other medical schools in the world. In addition, informing the SPs about the purpose of the study may have been misleading and altered their responses, despite our declaration of no any fear of being penalized. Also, the mean age of our SPs is younger than the average age of western SPs and the average patient population. We could not find any data to decide if this had an effect on voluntarism or not.

Never the less, opinions of volunteer SPs have not previously been sought in Turkey and other eastern countries. The strength of our study is that it is based on an explicitly conceptual framework, which is reported to lack in many educational studies (33). We chose the Basic

Needs Hierarchy because it shows a vision that has practical implications for the improvement of human health, goodness, and effectiveness, and as a whole, it creates a kind of sense, even with the limitations of its individual components. We believe that using this approach allowed us to understand SPs better than we did before.

Conclusions

The aim of this study was to harvest knowledge about perceptions of voluntarism from the perspective of SPs. Simulation is relatively a new form of teaching in medical education in Turkey and recruiting appropriate SPs is a major concern in addition to insufficient sources for compensation. Given these circumstances, the reasons for SPs to participate in such a different work group are worth exploring. Information about the perceptions and motivations of volunteer SPs would provide a starting point for further understanding of all the potential factors that may have an effect on the SPs' psychological and emotional well-being. The Basic Human Needs Model can be used in the medical education environment to understand the goals and passions that impact humans in their everyday life and is also a valuable concept to better understand what volunteer SPs strive to reach their potential. The basic human needs model reveals that basic needs such as safety, belongingness, self-esteem and self-actualization are directly related to present concerns experienced by voluntary simulated patients. Although many studies are consonant with Maslow's theory, it is also criticized with respect to its one-dimensional linearity, cross-cultural validity and underestimation of social-cultural factors (34-36). Therefore, revised models of Maslow's basic human needs theory exploring cultural differences may have provided better explanations. For example,

Yang proposed that needs for genetic existence and transmission are universal but that needs for genetic expression are culture-bound and offered a double Y model based (37). Yang added two major variations of culture-specific expression needs for each of the three stages of Maslow's needs. These were 1) individualistic needs, significant in individualist cultures like those in North America and certain European nations and 2) collectivistic needs, suggested for people in collectivist cultures like China. He recommended using the Y model with collectivist nature for people in collectivist cultures like those found in East Asian countries and the Y model with individualistic nature for individualist cultures like North America and Europe. He claimed that collectivistic needs for belongingness, esteem, and self-actualization dominate in collectivistic cultures like those found in East Asian countries. As mentioned by Hofstede, we agree that culture affects need patterns and Turkey has a markedly different culture compared to American culture (38). Studies conducted in Asian countries have revealed that the relative order and importance of the basic needs of Asian people are strikingly different from those as conceived by Maslow for American or Western people (39-41). Therefore, one should interpret our results with caution and remember that further research using novel theories may contribute more on this subject.

To make the simulated patient feel secure, needed and appreciated could possibly result in enhanced motivation and happiness and provide sustainability. Faculty should value the importance of basic human needs model and take into consideration the needs of the volunteer SPs from this perspective. The circumstances that provide challenges and opportunities for meeting those needs should be evaluated and action should be taken for improvement. We

hope that optimizing the circumstances for self-actualizing will enhance motivation of SPs.

Conflict of Interest

The authors declare that they have no conflict of interest.

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