

“You Cannot Perform Music Without Taking Care of Your Body”

A Qualitative Study on Musicians’ Representation of Body and Health

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OBJECTIVE: To identify professional musicians’ representation of health and illness and to identify its perceived impact on musical performance. **METHODS:** A total of 11 professional musicians participated in this phenomenological study. Five of the musicians were healthy, and the others suffered debilitating physical health problems caused by playing their instruments. Semi-structured interviews were conducted, transcribed verbatim and analysed. Thematic analysis, including a six-step coding process, was performed (ATLAS-ti 6). **RESULTS:** Three major themes emerged from the data: music as art, the health of musicians, and learning through experience. The first theme, music as art, was discussed by both groups; they talked about such things as passion, joy, sense of identity, sensitivity, and a musician’s hard life. Discussions of the second theme, the health of musicians, revealed a complex link between health and performance, including the dramatic impact of potential or actual health problems on musical careers. Not surprisingly, musicians with health problems were more concerned with dysfunctional body parts (mostly the hand), whereas healthy musicians focused on maintaining the health of the entire person. The third theme, learning through experience, focused on the dynamic nature of health and included the life-long learning approach, not only in terms of using the body in musical performance but also in daily life. **CONCLUSIONS:** The centre of a musician’s life is making music in which the body plays an important part. Participants in this study evidenced a complex link between health and musical performance, and maintaining health was perceived by these musicians as a dynamic balance. Our results suggest that learning through experience might help musicians adapt to changes related to their bodies. *Med Probl Perform Art* 2012; 27(3):129–136.

Playing-related health problems of professional musicians are not a new discovery.¹ In the 19th century, writer’s cramp forced Robert Schumann to give up playing the piano.² Musicians make extreme demands of their bodies, demands that are not unlike the demands made by athletes. The entire body is involved in playing an instrument: muscles, tendons, and joints are stressed;³ musicians—like athletes—regularly practice the same movements for several hours per day;⁴ in addition to this physical stress, musicians

have to be able to sustain psychological stress.⁵

Historically, health problems in musicians have been researched from an epidemiological⁶ and neuroscientific⁷ point of view. It has been suggested that other health-related aspects (environment, personal characteristics) should be considered in a systematic way⁸ in order to improve the availability of effective evidence-based treatment for musicians. A biopsychosocial approach to musicians’ health might bridge the gap by combining biomedical science with the human connection that is important for care and teaching.⁹

Playing-related musculoskeletal disorders (PRMD) are defined as health problems affecting the entire person physically, emotionally, and socially in his/her daily activities.¹⁰ The prevalence of musculoskeletal problems among professional musicians is similar to the prevalence of such disorders among manual workers. Due to the differences in the definition of the health problem in various studies and the different types of musicians being studied, it is difficult to state an exact rate of PRMD. In fact, the literature suggests a rate up to 80%.¹¹ A few recent studies show that this number is not going down: one Australian study¹² investigating children and adolescents (ages 7–17) reported that 67% of students experience symptoms during their instrumental practice. Two other European studies described an even higher rate in professional orchestra musicians, with 86% of instrumentalists in Great Britain reporting regional pain in the last year,¹³ and in Denmark, 83% of female musicians and 97% of male musicians reporting pain.¹⁴

The consequences of PRMD for musicians are multiple: physical, emotional, and social problems, as well as financial strain can be observed.¹⁵ The occurrence of PRMD can be devastating and put a musician’s career at risk. Nevertheless, musicians do not seem to seek medical help even when experiencing health problems. It is argued that one of the reasons for this is the culture of silence that seems to prevail in this environment.⁶ However, other explanations could be considered such as the lack of time, financial issues, or health coverage.¹⁶ Anti-inflammatory drugs are usually used to diminish pain and tension,¹⁷ and the use of beta blockers against stage fright is quite common, although a taboo.¹⁸

We understand that musicians are exposed to physical, psychological and social strain and that they are at high risk of developing playing-related musculoskeletal disorders. However, not much is known about musicians’ experiences and representations in regards to health and illness. A litera-

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ture search revealed only a few qualitative studies: some studies investigate patients' perceptions about listening to music during surgery¹⁹ while others tackle the topic of this article—musicians' perceptions of their health.^{15,16} Guptill's recent article¹⁶ provides interesting insight into the lived experience of professional musicians with PRMD. She discovered that musicians participate in three different roles (musician, worker, and teacher) and that four existentials (lived time, lived body, lived space, lived social relations) permeated their experience of being injured. A similar study was performed in Australia with elite pianists.¹⁵ Both studies used qualitative research methods (interviews), which were appropriate for investigating the musicians' experiences. In a recent editorial in this journal,^{20(p64)} Manchester argued that "qualitative research has the potential to provide performing arts medicine professionals with important information that can help us develop a better understanding of the problems that many musicians and dancers face."

The literature review shows that playing-related musculoskeletal problems are still very frequent and that few studies have been done to shed light on experiences of musicians with physical problems. There is still a need to know more about how musicians, with or without physical problems, understand their health as well as their bodies. As artists—entirely devoted to their art—they might perceive their health in a particular way.

Health Representations

Serge Moscovici²¹ was inspired by Durkheim's concept of collective representation. Collective representation is defined as a process of both psychological and social elaboration that responds to the necessity of structuring and interpreting reality. Collective representations include information, opinions, and beliefs emerging from both individual experiences and interindividual exchanges. These collective representations are present in an unconscious way within each individual and thus determine the way each individual behaves.²¹

According to Jodelet,²² a group's representations have a direct effect on the cognitive functioning of each individual within this group. The meaning given to illness, health, and the body is part of a collective interpretation shared by an entire group.²³ Because processes determine the way reality is interpreted, we consider it important to analyze musicians' representations of their health and illness. The objective of this study is to identify professional musicians' representations in regards to health and illness and to describe their perceptions of the impact of health and illness on musical performance. We wanted to get both perspectives: from musicians with health problems and from a group without problems.

METHODS

The study was conducted with a phenomenological philosophy. The methodology can be categorized as (a) descriptive, (b) interpretive, or (c) social phenomenology.²⁴ For this study, the descriptive approach was chosen. Giorgi²⁵ defines the aim of

phenomenology as being able to describe the essential structure based on descriptions of experiences from others. Merleau-Ponty created a link between phenomenology and music.^{26,27} He stated that "the body is not so much an instrument nor an object, but rather the subject of perception, socially and indeed sub-culturally mediated though that perception may be."^{28(p117)} Merleau-Ponty's argument is that a description about the perception and experience of human body behavior is preferable to a theoretical intellectualism of a culture.²⁹

Participants

A total of 11 professional musicians (instrumentalists) participated in the study, which included 6 musicians with debilitating physical health problems caused by playing their instrument and 5 musicians with no major physical problems. Informed consent was received by all participants prior to enrolment, but formal approval from the local ethics committee was not required. Participants were recruited either through physiotherapists (for the group with health problems) or music schools (for the healthy sample).

Data Collection and Analysis

The semi-structured interview is an inductive method that helps the researcher understand the meaning participants give to their reality and their practice.³⁰ For this study, an interview guide was developed in order to ensure that topics of interest were covered (Figure 1). Interviews were held in French, transcribed verbatim, and translated into English for the purpose of this paper. The method of thematic analysis described by Braun and Clarke³¹ was used to identify major themes. Researchers followed a step-by-step approach, which included becoming familiar with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. The data analysis was performed with the help of a computerized program for qualitative studies (ATLAS-ti 6; Cleverbridge AG, Cologne, Germany, www.atlasti.com).

Reflexivity

Reflexivity—thoughtful, conscious self-awareness—is one of the criteria used to assess rigor in qualitative research. Reflexive analysis includes continuous evaluation of subjective responses, intersubjective dynamics, and the research process itself.³² In this study, the research diary helped the authors to increase their awareness of developments, of feelings, and of thoughts that guided further methodological steps. The iterative analysis done by both authors helped to ensure the validity of the data analysis.

FINDINGS

Our sample consisted of 11 professional musicians of both sexes and of various ages. Their primary instruments differed, as did their health problems (Table 1).

Professional dimension:	What is the link between your health and your contracts? Does being on sick leave have an influence on your professional activity?
Sociological dimension:	From a general point of view, what does health bring to somebody? From a general point of view, what does illness lead to for a person?
Social dimension:	Does your health have an influence on your salary? Does your physical state have an influence on your relationships?
Psychological dimension:	What do you think about the expression “well in mind and body?” Does your health have an influence on your self-esteem?
Personal dimension:	Does your physical trouble influence the trust you have in your body? Did your view about your body change after your physical trouble?
Medical dimension:	Do you have some common goals with your therapist? What is the influence of your way of living according to your state of health?

FIGURE 1. Interview guide. Questions to initiate discussion.

We interviewed 5 healthy musicians (interviews 1–5) and 6 musicians with health problems (interviews 6–11). Each interview lasted about 1 hour. Three themes emerged from the data; the first one was discussed similarly by both groups, while healthy musicians and musicians with health problems discussed themes 2 and 3 differently. The three themes that emerged from the data were:

- 1) Music as art
- 2) Health of musicians
- 3) Learning through experiences

Music as Art

This theme includes categories related to the artistic expression of music, such as passion, pleasure, sensitivity, and a strong sense of identity.

Passion and Pleasure

Music is a passion for the interviewed musicians. They live for their art and consider themselves very lucky. The following excerpt shows the comparison with major artists from other domains.

When you do music because you love it, you are very lucky, but at the same time you have precious material in your hands; (. . .) I say to my students: you understand this piece you play—it is as if you have a Picasso in your hands. (Interview 2: 37)

Passion and pleasure go hand in hand.

It is pleasure with a capital P. Well, it is work as well, but it is eh . . . the music with a- a- a capital P. Music with a lot of pleasure. (Interview 4: 83)

Strong Sense of Identity

Music is clearly more than a job. Even though it is perceived by participants as a tough job, there is the feeling that it is a vocation. Even for musicians with poor health, quitting is

not an option. They are very proud to be musicians but feel vulnerable. They have a strong sense of identity and feel that they are more in charge of their lives than they would be in an office job with an 8-to-5 schedule.

Well, when you work in an office, you work in an office: somebody asks you to do . . . the work that you do and that's it; you leave at night and that's all. Whereas here, you still always continue to work, you think about your scores, you think about future concerts, and then eh . . . well you are much more exposed than if you are in an office, because you give a part of yourself when . . . and then it is your personality . . . that they are going to judge in fact. (. . .) It is to come across through music with a message, and then it is actually you who gives a part of you. Therefore, you are very naked in fact. (Interview 5: 27)

Sensitivity

As mentioned previously, musicians are known to be sensitive. They are artists in the sense that they live experiences intensely and with extreme emotional swings (between e.g. joy and passion).

You have a tendency to be all the time a bit in the extremes. (. . .) Emotionally it requires a lot. (. . .) We are people who have, by obligation, a certain sensibility; otherwise you wouldn't do it. But this brings us to the point of living with much turbulence, many intense moments in everything we do, if it is with joy or with sadness or in stressful situations, (. . .) because there is not really a line of stability that we can count on. (Interview 8: 290)

Well, it is really eh . . . it is this type of atmosphere. That means it is a bit aggressive. (Interview 1: 39)

Musicians' Hard Lives

Musicians love what they do, and they are conscious about the emotional aspects of their art. There is hard work to be done in order to get and stay at a high level of performance. Both healthy and symptomatic musicians make a tremendous effort, which they feel at the end of the day.

TABLE 1. Description of the Population

	Age (yrs)	Sex	Instrument	Health problem
Healthy musicians				
Interview 1	17	Female	Piano	} none
Interview 2	50	Female	Flute	
Interview 3	52	Male	Clarinet	
Interview 4	50	Male	Trumpet	
Interview 5	45	Female	Piano	
Musicians with physical problems				
Interview 6	52	Female	Violin	Tensions
Interview 7	24	Female	Piano	Tendinitis
Interview 8	34	Female	Piano	Tendinitis
Interview 9	27	Male	Electric guitar	Tendinitis
Interview 10	24	Male	Piano	Focal dystonia
Interview 11	26	Male	Piano	Focal dystonia

There are things that are worked, worked, worked, worked; it is high level because you work without stopping ever. (Interview 1: 28)

What I ask from one hand is about what a footballer asks from his legs. (. . .) I don't know how many meters I make in a day on the guitar during my ups and downs on the scale. (Interview 9: 819)

This first theme presents the artist “tightrope walking” between passion and sensitivity. Musicians go beyond their limits in order to live their art. Hard work is their mantra, and music is their joy.

Health of Musicians

The second theme emerging from the data is musicians’ consciousness about how performing music affects health, or how health affects musical performance. It is clear to the musicians in our sample that body posture can have an influence on sound. The link between the body and the quality of their performance is clearly established.

Link Between Health and Performance

The posture, it influences the sound a lot. If you are crouched, you have a small sound. It is not very nice. If you are upright and you are using the back muscles for keeping you straight. (. . .) The sound is much more beautiful, more round, more powerful. (Interview 7: 82)

If you are holding yourself straight, the sound is also different. It is not only beneficial from a health perspective but also for the violin. The first instrument it is still your body first. (. . .) If you are fine physically, it liberates the play, it liberates the expression. (Interview 6: 31)

Whereas a good posture is described as having a positive impact on the sound, the opposite can also happen. If the body is not relaxed, being free for musical interpretation is impossible. Pain is considered an indicator of not doing the right thing, of not maintaining the good posture that supports good performance.

I think also that there is the side of the freedom of interpretation ehhm . . . it could be the imagination, the intuition; if you are completely blocked physically, I have some trouble imagining eh . . . that you are free. (Interview 3: 12)

The pain, it is an indicator . . . that something does not work. (. . .) This is the sign that something is not all right. Either you do not play your instrument correctly in postural terms, or you use too much energy, or you are not good in what you are doing; you have to change the group or the music school. (. . .) But for me the pain, it would be an indicator eh . . . that you have to ask yourself some questions. (Interview 2: 43)

Even though the link between the body and the quality of the musical performance is accepted by musicians regardless of their past medical history, there is a considerable difference between the ways healthy musicians approach physical problems and the ways those with a history of health issues approach these problems. Musicians in our sample who had previous physical problems focused on certain body parts, especially the hand, while healthy musicians had a more global approach to their body.

Dysfunctional Body Parts Versus Dynamic Balance

Musicians with physical problems:

Well, the health of the hands, it is the object of all attention. (. . .) I would even say it directed my professional choices, because I would have liked to pursue a more manual profession. (. . .) When you come back home after a day of using a spade, a pickax, or carrying a chain saw, (. . .) you take the guitar, you don't feel anything anymore! (. . .) It is the only reason to go to see a physician. (Interview 9: 8)

Healthy musicians:

And then I was really looking together with the engineer to have a . . . a play where I only have the weight of the finger descending and the key is closed; so there was nearly eh . . . no tension in the fingers, and then to find eh . . . the wrist, the . . . the shoulder, the elbow, well all joints to stay eh . . . always open. (. . .) For me it was this actually: it was to look for the easiness (. . .) to look for . . . yes the fluidity. (Interview 3: 22)

So I explain [to my students]: if you take for example a note, to feel that it comes from behind the back and not just to concentrate on the point of contact with the instrument. (Interview 2: 13)

The preceding two excerpts were from interviews with healthy musicians. Healthy musicians seem to have an approach to their bodies that is different from the approach of their colleagues with physical problems. The following extracts show that they tend to listen to their bodies and ask themselves questions.

Listening to the Body and Balancing Out

So, well if . . . you are attentive to the signs of the body, and if you ask yourself those questions, for me and to say: and why now? What happens now in my life? What is not working? How do I work? First, this is the first thing that I do . . . giving that it is the body. (. . .) Like I told you, that we are to the point permeable, (. . .) you cannot perform music without taking care of your body. (Interview 2: 48)

If there are busy schedules, it's true, you think of balancing; I mean eh . . . to sleep a certain amount of hours in order our health, actually our top form physically and intellectually to be available, and to . . . well to do it again with joy in fact. (Interview 4: 6)

What our data revealed so far was that the health of the body plays an important part in the life of musicians. The link between posture/physical functioning and the quality of musical performance is omnipresent. However, there seems to be a difference between the two groups in terms of how these musicians deal with their physical problems. While healthy musicians express a need for reflection about the origin of the trouble, musicians who suffered previously of music related health problems seem to focus on the dysfunctional body part. This leads us to the third theme.

Learning Through Experience

The third theme goes beyond the awareness and the importance of the body for musical performance. It entails the dynamic nature of health, but puts the learning process at the centre. Healthy musicians understand that they have to develop body awareness and use some tools to explore this experience. They also focus on the importance of learning from past experience. This process can be described as a step-by-step approach to learning through experience.

Develop Awareness by Using Some Tools

I have two or three small exercises—very simple—that I do with the students in order for them to be aware, because sometimes it is . . . you have tensions, and you don't even feel it. (. . .) You are straight and you don't even feel that you are straight. (. . .) I think it is the first . . . the first thing to . . . to . . . to put in place. (Interview 3: 51)

It would be probably the role of the instrumental teacher to do this; to give you the necessary tools and then to explain. (Interview 3:37)

Make Their Own Experience and Learn From It

When I did this passage the best way possible, suddenly I felt what was modified in my body, or then I tried to see what happened in my body in order to explain the passage that was . . . it was wrong! It was not natural, I did not feel free. (Interview 2: 17)

What body region corresponds to what, and then I think it is good because it makes you think and then eh . . . you are able to find afterwards. (Interview 5: 26)

Another aspect of this learning process is the context in which musicians learn. The healthy musicians in our sample put an emphasis on important interactions with a lot of different people (friends, professionals from different domains). If they have difficulties during their musical practice, they are searching not for the one and only solution but for different approaches to help them find their way.

I was lucky to meet a lot of people who made me understand. (Interview 4: 9)

It seems to me that physicians should not necessarily intervene all the time because . . . yes, as I said before, it would be rather for psychologists or so or then people . . . well like a teacher of singing who works really on the body and on listening to the body or for example osteopaths like that. (Interview 5: 28)

In contrast, musicians with physical troubles were looking for help as the “solution.”

I went for x-rays, to a neurologist, I went to a masseur. (. . .) Nobody was able to tell me what it was. (. . .) Every time I went looking for help, nobody had an idea what I had. (Interview 11: 226)

Summary of Findings

The three themes, (1) music as an art, (2) health of musicians, and (3) learning through experience show the complex nature of musicians' understanding of their body and their attempts to reconcile the understanding of their body with art. As artists, musicians demand an enormous effort from their body.

Our study suggests that the key to a good balance between health and illness lies in the way musicians are able to learn from their experiences. Interaction with people surrounding them seems to be important for learning mindfulness in regards to their bodies. This new insight might lead to an increased awareness of the social component of learning.

DISCUSSION

Our goal in this study was to investigate the collective representations of health and illness offered by musicians with and without playing-related musculoskeletal problems.

We realize that the discourse of the two groups (healthy musicians and musicians with physical problems) is similar in terms of their approach to their art and in their descriptions of a close link between health and musical performance.

Musicians are above all artists. Kemp³³ and Manturzewska³⁴ confirm that particular personality of musicians.

Musicians' Personality—Music as an Art

Study results show that music students compared to other students show an increased egocentric attitude and a need for independence and autonomy. They are also considered more introverted and creative.³⁵ These particular personality traits have to be taken into consideration when working with this population. Our study confirms this state of mind by indicating the strong sense of identity perceived by our interviewed musicians as well as their tendency to be “a bit in the extremes” (sensitivity). The sense of identity is also confirmed in other studies.^{16,36} Not only does each participant feel very strongly about being a musician, each musician also has a very special relationship with his or her instrument.^{16,36}

Balancing Demands and Body Disposition—Health of Musicians

The sensitivity and strong sense of identity combined with the passion can be linked to musicians' health. Our results suggest that musicians are very well aware of the balance between physical constraints and performance. Some musicians in our sample clearly established the link between “feels good” and “sounds good.” Spahn et al.³⁷ suggest that only the experience of previous health problems will serve to influence future preventive actions. This is also confirmed in Guptill's research.¹⁶ Results of our study indicate that future preventive actions coincide with past experience, and it is mainly through reflecting on those experiences that musicians find a different approach to their bodies.

Healthy musicians in our sample emphasize experimental learning. However, this approach requires specific tools for addressing mindfulness in regards to the body, which might not be available to everybody. We believe that the balance between demands of the body and disposition cannot be achieved through simple recipes. Some biomedical approaches in the literature tend to be too narrow³⁸ and do not acknowledge the complexity of the treatment for PRMD. Nevertheless, an increasing number of articles describe a more holistic management to musicians' health problems.^{8,39}

Building the Way—Learning Through Experience

In understanding the relationship between performance and health, our study's contribution emphasizes the discovery of learning as a way of being. According to Illeris,⁴⁰ learning includes cognitive, emotional, and social dimensions. Underlying those dimensions are two basic processes: external interaction vs. internal psychological process. Our findings demonstrate that the external interaction, learning within the social dimension, seems important to remain healthy.

Healthy musicians in our sample, on the one hand, put a lot of emphasis on the interaction with others and on what they learned through this social dimension. On the other

hand, musicians with physical problems tend to look for the solution and rely less on social interactions as part of their learning process. Our data suggests that musicians seem to benefit from social interactions, and the social dimension of learning seems to be neglected by musicians with health problems. Our findings are reflected in the result of Guptill's study:¹⁶ musicians with PRMD indicate the close relationship between social aspects of music performance and the lived experience; however, the findings of our study indicate that social relations might help them achieve a healthy balance.

Limitations

We believe that our study's contribution is original in the sense that it compares health representation in both musicians with and without physical problems. Nevertheless, there are some limitations to this study. The sample size was small, with only five participants in one (healthy participants), and six participants in the other group (participants with physical problems). A required number is not easy to determine,⁴¹ as the number of participants depends on: the nature of the study (fewer participants needed for easy access of information); the quality of the data (participants' reflections on the topic); and study design (phenomenology needs less data than grounded theory). However, for future research, we recommend including a group selected by purposeful sampling to ensure a diversity of opinion.⁴²

Reliability and validity are quality criteria in qualitative research and enhance the credibility of the data.⁴³ By testing the interview guide beforehand, as well as by audio recording and carefully transcribing the interviews, we tried to satisfy the criterion of reliability. In addition, both authors reflected on and discussed the process of the analysis. The interview excerpts in the findings section should help the reader get the sense of the data, which makes the analytic process more transparent.

Validity, the second criterion, is a contentious topic in methodology articles. According to Silverman,⁴⁴ triangulation and member validation are inappropriate for validating field research. However, he suggests five ways to increase the credibility of the study: a) analytic induction (findings grounded in data, not based on theory); b) constant-comparative method (moving from small to large dataset to test hypothesis); c) deviant-case analysis (analyzing outliers); d) comprehensive data treatment (including all data); and e) appropriate tabulations (frequency). Our study falls short in the last aspect: tabulation. A future study might include some additional information on frequencies, and a mixed method study might even be indicated.

Despite some of the shortfalls of this study, qualitative studies offer a precious insight into experiences and can help health professionals working with musicians become aware of the musicians' representation and how to provide appropriate care. Future research should include different qualitative research methods (e.g. observation) to understand the social interactions within music communities (for example orchestras). Observational data might also help researchers under-

stand interactions between musicians and health professionals. Another direction for future research projects might be a mixed method study including various aspects (e.g. analysis of practice patterns, habits, and their perceptions about it) for trying to understand how musicians deal with their high-performing bodies.

Clinical Implications

Our study provides some particular insight into the musicians' perceptions in regards to their bodies and health. Passion and pleasure are their motors for pushing the limits. They identify strongly with the role of musicians and are passionate about their art. These facts need to be considered when treating health problems of this population. Musicians in our sample are very aware of the balance between body disposition and performance results. Nevertheless, the approaches they take to dealing with their bodies can be quite different. While some musicians overemphasize certain body parts (especially the hand), others take a more global approach to their bodies. What seems to be crucial to musicians' health is the learning process embedded in their instrumental practice. Health professionals should not only take into consideration the cognitive and emotional dimension of learning, but should also be aware of the importance of the social dimension. This more comprehensive approach will foster more fruitful interactions.

CONCLUSION

This article provides insight into musicians' collective representations about body and health. Our findings indicate that music is the center of their lives and that the body plays an important part in it. Three themes emerged from the qualitative data: music as art, the health of musicians, and learning through experience. Some professional musicians should be provided with an opportunity to learn from their experiences by developing body awareness. It also seems important that musicians develop the capacity to reflect on their experiences.

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