



The Effect of Health on Human's Moral Identity from Avicenna's Point of View (Focusing on Exercise, Nutrition, and Sleep)

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Abstract

Moral identity refers to those characteristics and attributes that play an important role in the formation of an individual's identity. Indeed, the role performed by moral attributes in the evolution of a person's identity is such that quite a few of today's scholars maintain the oneness of the "self/psyche" and "moral character". Adopting this approach, researchers have set out to produce a wide range of research works in the field of moral philosophy. The present study is an attempt to measure the effect of three components of 'exercise', 'nutrition', and 'sleep' on shaping moral character from Avicenna's viewpoint. The findings of the present research illuminate the fact that the latter three elements have a direct influence on an individual's temperament, whereby suitable grounds are created in which moral character develops. Avicenna holds that this statement may not challenge man's will and authority. The reason is that every individual—by identifying his own physical coordinates and applying the most apt instructions—can approximate his temperament to moderation. As a result, the necessary ground for developing the most desirable moral character is created.

Original Research



KeyWords

Avicenna, moral character, health status, sleep, exercise.

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Introduction

To Avicenna's way of thinking, from the onset of man's life, numerous factors are involved in shaping man's character. Some of these are related to his self (*nafs*) and some others are connected with his body and biological conditions. Avicenna favors the idea that though the soul/self/psyche ('*nafs*' in his language) does not need the body for its sustenance and constancy, in certain special circumstances, it is affected by the body. Among such conditions, one can refer to effects created in the self/psyche as a result of the body's characteristic temperament (Avicenna, 2000, Vol. 3, p. 31). The self (*nafs*) is related to the physical faculties (*quwā yi badan*) and the body and its affiliated faculties to necessary foresight. In this manner, it helps construct an individual's moral character (Avicenna, 1983, Vol.2, p. 28).

If the self/psyche/*nafs*, in accomplishing its everyday affairs, follows the loathsome characteristics of desire and anger, this leads it to acquire despicable habits. For going to extremes, '*ifrāt va tafriṭ*,' that is, excessive to scant reaction in dealing with worldly affairs, befits an animalistic disposition. If the psyche ('*nafs*'), however, overcomes these latter detested inclinations and comes to attain the power to observe moderation in everything it does, the possessor of such a psyche is adorned with the best moral characteristics (Avicenna, 2000b, p. 135).¹

Among the factors relevant to body and biological circumstances, the role performed by the state of health is of crucial importance to Avicenna. Health is directly connected to three determinants: exercise, nutrition, and sleep. The present article is an attempt to provide an answer to the following major question: What is the effect of the three factors: exercise, nutrition, and sleep, on an individual's character?

The necessity of dealing with this issue is defined as follows: We aim to increase man's awareness of his physical structure such that he pays particular heed to the importance of exercise, nutrition, and sleep. And if the individual takes particular care in the ways the above factors are properly employed, he/she can develop the best moral features.

To elucidate the state of well-being in a human's moral character,

1- In this part we mention Aristotle's idea: He knows moral virtues deal with affections and actions. He believes that a person who has virtue is moderate in his aim. In the practical reason, moderation means *i'tdāl* (no excess, no deficiency: *ifrāt & tafriṭ*) (Aristotle, 2011, p. 15). Thus, Aristotle declared that human virtue means habitus made humans good; secondarily, it made his special actions good. And this happens when humans regard moderation in their actions (Aristotle, 2011, p. 15).

we should clarify the concepts of 'individual character/ identity' and 'moral character/identity.' Also, it should be expounded how these two notions are related.

Individual Identity

Avicenna doesn't use the expression "individual identity" and doesn't focus his discussions on the common questions of today. But he directly analyzes human dimensions, and among his philosophical principles, he considers the feature of individual identity. We can equate "personification" with "individual identity." Avicenna believes that personification prohibits the sameness of a person with others. In other words, everybody has some special features that all of them characterize and distinguish a person from others (Avicenna, 2000a, p. 123).

It is well-known that he carried out extensive and profound investigations on a human being's existential structure. Through his discussions, he explains the formative stages of an individual's personality, that is, their personalization. In light of his views, the definition of 'individual identity' can be expressed as follows. We can deduce this definition from his works on "individual identity":

The entirety of features and attributes relating to each individual's body and '*nafs*' are developed as a result of the interaction of his body and '*nafs*' or alternatively, between his physical and non-physical (immaterial) faculties. The latter features and attributes are acquired through the interaction of human and natural (non-human) factors and influences. Later, as a result of continued effort and reiteration by the individual, the latter features and characteristics become his constant and unchanging self/nature, and, if you will, his "second nature". This is what makes each individual a unique entity. Human moral characteristics, deeds, and behaviors are among features more related to the body/ the flesh while his intellectual perceptions and exercising free will and determination are considered to be more related to his '*nafs*' and immaterial dimension. These entire characteristics are in constant interaction, mutually affecting one another. And their combination as a whole works as a unified and integrated system. That is to say, the bodily characteristics of each individual bring about commensurate effects on his '*nafs*' (most inherent spiritual particle every human being is endowed with) and vice versa.¹

1- Avicenna's point of view about the reciprocal relation between the soul and body is similar to Aristotle's idea. Aristotle knows the soul as a form of the body, so they organize one thing and distinction of them like every essence compounded substratum and

(Avicenna, 1984, p. 106; Avicenna, 2010, Vol. 1, p. 279)

From the above explanations, it can be concluded that the upshot of the actions of the body and the '*nafs*', as well as the interactions between existential immaterial and material aspects of each human being – forming his constant features through repetition – constitute his identity. This identity is an entirety of his morality, behaviors, habits, beliefs, and thinking.

Taking the above definition into account, it should be clear that the concept of 'individual identity' has broader implications than that of 'morality.' In the present article, however, individual identity is considered only from the perspective of 'morality.' As a matter of fact, the effect of exercise, nutrition, and sleep on the latter identity is investigated.

Moral Identity

Most research studies report on the formation of moral identity argue that morality and human identity are strongly merged. Indeed, morality and identity are two sides of the same process.

Discussions on individual identity or moral identity as are treated in today's philosophical societies, have no equivalent as such in the works of past philosophers like Avicenna. The material we are pursuing, however, is noticeably observable in his books and treatises. Furthermore, Avicenna's anthropological (in a restricted sense) ideas are quite evident in his works, be it philosophical or medicinal. In fact, they provide a sea of knowledge for researchers well-versed in Avicennian wisdom.

Avicenna exposes his ideas on morality in a consolidated form by penning two short treatises: "*Risālah fi-l-Akhḷāq*" (Treatise on Morality) and "*Risālah fi-l-birri va-lithm*" (Treatise on Benevolence and Malevolence). Also, sporadically, he refers to moral ideas in two books, *Ishārāt va Tanbihāt* (Remarks and admonitions on logic and philosophy) and *al-Shifā'* (The Book of Healing on logic, Islamic philosophy, mathematics, and philosophia naturalis). In Avicenna's view, moral attributes belong with the human '*nafs*' (the most inherent spiritual aspect in all human beings, hierarchically capable of being nurtured to reach Allāh (God)). The originator of all these attributes is

form is a conventional and conceptual distinction, not a determinate distinction. In Aristotle's ideas about the soul and body, most human actions are related to both dimensions of the human. He considers all of them as one existent (Aristotle, 2011, p. 8).

the actions of the body. And since the flesh (body) and the '*nafs*' are in a mutual relationship, the issue of creating a particular moral attribute through bodily actions and its stabilization in the '*nafs*' is well-reasoned and clarified (Avicenna, 1953, p. 135).

Human morality is established through the repetition of deeds and behaviors. If those deeds and behaviors are good and commendable, admirable and worthy morality develops. If not (i.e., bad and despicable deeds), they bring about loathsome and contemptible morality. What is worth noting in Avicenna's moral outlook is the role played by a human being's volition, willpower, and acquisition in moral development. In his view, it is impossible that a human in his divine instinct (*fiṭrah*) is born with moral vices and virtues. That is, it is impossible that certain groups of people are born with either good or bad moralities. Rather, the most that can be expressed in this regard is that some groups of humans show a higher inclination and aptitude towards gaining good or bad morality. This means that for certain groups, performing actions that lead to acquiring a particular moral attribute (good or bad) is facilitated (Avicenna, 1998a, p. 36).

Hence, morality as he sees it, is an acquired characteristic. And the individual, by making his best effort, can attain his desired moral attributes or bring about changes in his undesirable personality traits.

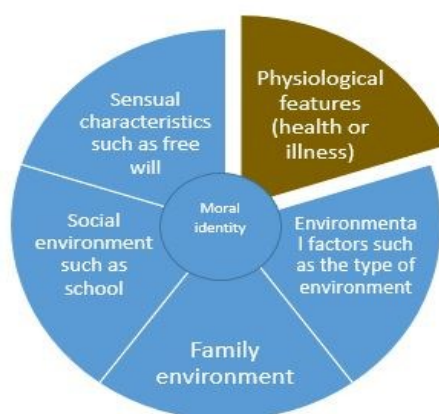
Now, the important question we intend to deal with is as follows. What factors bring about a particular morality in a person? And what are the required grounds/conditions for him to attain his desirable moral structure?

By investigating Avicenna's works, one can arrive at the determining factors of moral identity development in his view. They are as follows:

1. Soul-related characteristics like volition and willpower (Avicenna, 2000b, p. 133);
2. Family environment¹ (Avicenna, 1958, p. 33);

1. In Avicenna's ideas, the place of the family is very important for creating admirable morals. When the baby is weaning he starts to have admirable morals. At this moment, before establishing bad morals in his soul, the parents should turn him to good morals. Because this stage is the best time for deepening the structure of the baby's identity (Avicenna, 1985, p. 14). Avicenna believes that in this stage of the life of the baby, we should keep the baby away from every despicable thing and we should fulfill his wishes. Observing this rule leads to spiritual and physical advantages. The spiritual advantage is that the baby falls into the habit of good morals and behavior from his childhood, and it settles in his essence. And the physical advantage is that his constitution remains moderate and his body remains healthy because, based on the mutual relationship

- 3- Social institutions like school and friends (Avicenna, 1958, p. 45);
- 4- Physiological features like health or illness¹ (Avicenna, 2010, Vol. 1, pp. 169-367);
- 5- Environmental factors like the type of environment² (Avicenna, 2010, Vol. 1, p. 212).



Picture No. 1: Factors that Constitute Moral Identity

In the present article, we aim to investigate how the state of health (as a physiological factor) can affect moral identity.

The State of Health's Effect on Moral Identity

Wellness is primarily a normal biological state. It is important, however, to have a holistic view and to know that the body's health positively affects the state of mind.

between the soul and body, as a malady in the constitution causes bad behavior, bad morality destroys the constitution, and vice versa (Avicenna, 2010, Vol. 1, p. 364).

1. When a child goes to school, in this period, all of his conditions, behaviors, and actions are affected by his teachers and classmates. For example: When a person is in a suitable environment and beside his teacher and wise classmates with good action, he possesses excellence and is capable. Thus, he has the potential to accept other admirable features and vice versa (Avicenna, 1985, p. 14).
2. In Avicenna's ideas, one of the innate factors that affected moral identity is the environment. For example, People who live in a cold climate are braver and more resistant than other people who live in another place. And the people who live in warm climates gradually became timid.

Avicenna considers the state of health from among those factors that directly impact bodily temperament. As a consequence, an individual's moral attributes and spiritual states are affected. This, in turn, causes the effects of the state of health to gradually become established as constant and stable fixtures of the *nafs* (cf. above). In his definition of wellness, Avicenna explains that wellness is a state in which the human body, as regards the temperament and its constituent elements, is placed at such a state of quality that accomplishes all bodily functions in a proper and well-ordered manner (Avicenna, 2010, p. 169).

The triple factors of 'exercise', 'food', and 'sleep' are the most important ones, playing essential roles in man's good health (Avicenna, 2010, p. 367). These factors, by influencing the temperament, bring about particular morality types in individual human beings. In order to clarify their (the triple factors') effects on the temperament and, as a consequence, on morality, we should first elucidate what the temperament is. Furthermore, the types of temperaments must be determined.

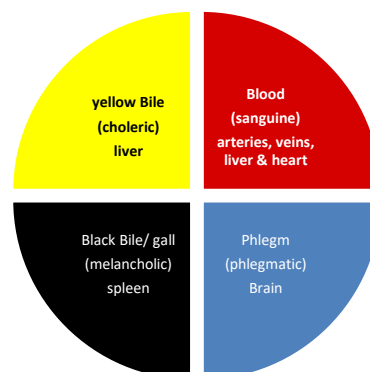
Avicenna maintains four humors, namely, blood, phlegm, yellow bile, and black bile. He states their characteristic features as warm, cold, dry, and wet. He defines temperament as a combination of the above humors and their characteristic features. If in this combination there is an equal (or near equal) portion of the above characteristic traits, it is said that the person in question has a moderate temperament. In case one feature dominates, other temperaments emerge.

When warm and dry dominate -----> melancholic temperament results

When cold and dry dominate -----> choleric temperament results

When cold and wet dominate -----> phlegmatic temperament results

When warm and wet dominate -----> sanguine temperament results



Picture No. 2: Types of Temperaments

How Can Exercise Affect Moral Identity?

Avicenna emphasizes the role of sports and physical exercise, believing that anyone who can exercise in a proper manner and at an opportune time develops a moderate temperament (Avicenna, 2010, Vol. 1, p. 366). But what are the characteristics of a person who enjoys a moderate temperament? From his perspective, the possessor of such a temperament enjoys the best moral attributes and traits. Because he sports a rosy countenance and has an obliging and adaptable personality. Besides, in exercising morality, he does not go to extremes, consistently trying to strike a happy medium. This person is therefore not too bold nor too timid, neither too wrathful nor too unresponsive and sluggish. Moreover, he is not too clever in dealing with others nor too merciless; neither too rogue, nor too grave and standoffish. Finally, he is neither too arrogant nor too self-contemptuous (Avicenna, 2010, Vol. 1, pp. 278-279).

The reasons Avicenna proffers as to why humans need to take exercise are as follows: Our good health is preserved by having food. However, not all the food we eat has nourishing values. That is, in the digestion stages, some of it becomes excess matter/waste and the body tries to expel that. The waste that needs to be discharged is not completely removed from the body. And certainly, after each digestion, some waste matter remains in the body. The amount of this waste, if increased excessively, would adversely affect the body. For example, when the body is afflicted with infectious diseases, there is an imbalance in the body's temperament. As far as medical solutions are concerned, forcing the waste out of the body is done by several means. And choosing each manner of waste disposal – except through bodily exercise – can have its own adverse effect.

If waste is eliminated with the help of toxic drugs, the toxic drug itself reduces body strength and exhausts its faculties.

If waste disposal is carried out through non-toxic drugs or procedures, the body undergoes undue strain and pressure. In Hippocrates' words, "Drugs both alleviate pain and betray the body." Further, in discharging waste matter from the body, drugs or other bodily therapies drive out the body fluids/humors that are necessary for maintaining a moderate temperament. In this way, the strength and power of major organs follow a downward trend.

Eliminating waste/excess matter and at the same time preserving body moderation through physical exercise is assuredly a safe way obviating the need for any type of medication (Avicenna, 2010, Vol. 1, p. 367).

The imbalance in temperament affects an individual's morality and mood in several ways. If the temperament of heat prevails, moral characteristics and moods like "extreme wrathfulness", "restlessness and perturbation", "immodesty", and "ruthlessness" come about. If the temperament of coldness dominates, the very opposite features and traits are created. If there is an excess of moistness in temperament, the individual is afflicted with "transient impassivity." If the temperament of dryness prevails, such moral traits and features as "stability in wrath and conciliation", fantasizing, and introversion" come about (Avicenna, 2010, Vol. 1, pp. 277-278).

What is the Effect of Nutrition on Moral Identity?

Nutrition is one of the most important factors in accessing morals. Using some foods and drinks is directly related to the temperament of the body, and so affects the moral identity of a human being.

1- Types of Nutrition and Their Effects on the Body

The most essential effect of foods and drinks on a human's body is the change they create in body temperament. A person desiring to consume best-suited foods should always heed the following: He ought to select and consume foods that mostly agree with his body temperament. For example, if he has too hot a temperament, he should seek to use cold-natured foods to restore his body balance. That is why Avicenna places particular emphasis on the fact that for each particular temperament, certain special foods are prescribed. In case the individual takes no heed of the latter fact, he will lose his temperament moderation (Avicenna, 2010, Vol. 1, p. 383). In earlier parts, it was discussed how an immoderate temperament affects a person's morality and mood.

Avicenna, in the last and fifth volume of his encyclopedia of medicine, *al-Qānūn-fī-l-Tibb* (The canon of medicine), presents a list of foods having hot, cold, moist, and dry natures. In particular, he reminds the reader of three points: 1) Each individual should consume certain foods commensurate with his own temperament. 2) Each food with its own characteristic nature affects the body's temperament. 3) Moral characteristics and moods are shaped under the influence of particular temperaments. To cite some examples, excessive consumption of cold foods like vegetables brings about an increase in the cold temperament. Such a temperament causes the individual to be indolent, lethargic, and unmotivated (Avicenna, 2010, Vol. 1, p. 390).

Having hot-natured foods like wheat, hazelnuts, ginger, and pepper on a regular basis gradually brings about hotness in temperament. This temperament, in turn, creates characteristics and traits in an individual such as “extreme wrathfulness”, “restlessness and perturbation”, “immodesty”, and “ruthlessness” (Avicenna, 2010, Vol. 1, p. 278-279).

The quantity and quality of food in regulating temperament and, as a result, in affecting a person’s morality, should not be underestimated. Avicenna, in a classification based on quality, introduces the following best foods in terms of body temperaments:

- Best foods for melancholic temperaments is fine/light ones¹ having lower-level heat,
- Best foods for choleric temperaments are light/fine foods having a cooling effect,
- Best foods for sanguine temperaments are cold foods having low nutritional elements²
- Best foods for phlegmatic temperaments are light/fine ones of hot nature (Avicenna, 2010, Vol. 1, p. 382).

One should always take into account the amount of food he consumes. If the consumed food is more than what the body needs, it leads to indigestion, illness, and infection. This causes an increase in body coldness. The dominance of coldness in temperament gives rise to such personality traits as “apathy”, “laziness”, “slow wittedness”,

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1. What does Avicenna mean by ‘light’ or ‘heavy’ foods and what does each one include?
To answer, one can say that by heavy foods, he means those foods not easily digested. They produce excess/waste matter which can easily amass together, blocking veins and arteries. Heavy/concentrated blood is a result of consuming heavy foods. In contrast, ‘light or mild’ foods refer to those foods easily digested by the stomach. And by consuming them, diluted blood is produced. Light or mild foods function better than heavy foods in that they preserve body health. But their invigorating effects in producing nimbleness and agility in an individual are less than those created by heavy foods (Avicenna, 2010, Vol. 1, p. 378-388).
 2. By lowness and highness in nutritional elements, Avicenna refers to the main ingredients and nutrient values. These constituents help produce blood in the body. Avicenna divides each group of ‘light’ and ‘heavy’ foods in two categories of “high nutritious element” and “low nutritious element.” Examples of each division can be briefly given as follows:
 - Meat, warmed up or half-cooked egg yolks, are among light/fine foods with high nutritious elements.
 - Rose flower essence, vegetables, apples, and pomegranates are regarded as light/ fine foods with low nutritional elements.
 - Boiled eggs and meats are considered heavy foods of high nutritional elements.
 - Cheese, dried meat, eggplant, and the like are subsumed under heavy foods of low nutritional elements (Avicenna, 2010, Vol. 1, p. 224).

“cynicism”, “despair”, and “passivity” (Avicenna, 2010, Vol. 1, p. 277-278). The amount of food consumed, if it is less than what the body needs, brings about “lethargy”, “slothfulness”, and “indolence” (Avicenna, 2010, Vol. 1, p. 224).

As explained above, the quantity and quality of nutrition both affect the temperament. As a result, particular type of moral characteristics and moods develop. The important point to remember is that in order to have good nutrition, we first need to have a proper understanding of our temperament. Avicenna mentions nine ways through which different types of temperaments are recognized (Avicenna, 2010, Vol. 1, pp. 272-275). Following this guideline, an individual can easily draw up a food plan that matches their respective temperament. Thus, he can keep his body system away from weakness or illness. The end result is that he can strive toward acquiring the most admired moral characteristics and traits.

2- Types of Water and Their Effects on the Body

No doubt water is the most important combination in the universe that preserves life. All of us consume considerable amounts of water on a daily basis. More or less, we are aware of its importance in relation to changes in our physical and spiritual conditions. In order to investigate the effect(s) it has on our bodily modes and consequently on our moral attributes, we should have a proper understanding of the type of water we drink. In Avicenna's way of thinking, all waters are identical in nature. But because of external admixtures and transformations that types of water undergo, different water states are produced.

Avicenna divides waters into desirable and undesirable ones. Sulphur-containing, cold, and lukewarm waters are considered to be desirable waters as they positively affect human morality. For instance, sulphur-containing waters are beneficial to the nervous system (Avicenna, 2010, Vol. 1, pp. 225-240). Obviously, one who drinks such water for a long time develops the ability to overcome his/her wrath and fury. Also, things that go against his wishes do not perturb him/her very easily. Cold water strengthens the body and produces the same effects on one's moral and spiritual characteristics. That is, such water makes him courageous (Avicenna, 2010, Vol. 1, p. 240). Lukewarm water is efficacious in moderating the temperament (Avicenna, 2010, Vol. 1, p. 241). And when the individual's temperament is in a moderate state, his moral attributes, likewise, become moderate, making him an obliging and agreeable person (Avicenna, 2010, Vol. 1, pp. 278-279).

Snow and ice-melted waters, warm water, and salt water are classified as undesirable water types. They have adverse effects on moral characteristics and attributes. For instance, drinking snow and ice-melted water for a long time brings causes the nerves to weaken. Clearly, nerve weakness is the cause of many a despicable trait. Persistence in drinking warm water brings causes the lowering of body moisture. This same factor causes a person to become timorous and cowardly (Avicenna, 2010, Vol. 1, p. 278-279). Regular drinking of salt water dries up the body's temperament, giving rise to the development of a despicable morality in an individual (Avicenna, 2010, Vol. 1, pp. 225-240). In previous discussions, it was pointed out that the dryness of temperament is a leading factor toward developing such features and traits as "stability in wrath and conciliation", "fantasizing and introversion", etc.

What Effect Does Sleep Have on Moral Identity?

Sleep is one of the other factors directly affecting bodily temperament and, as a consequence, moral character. Avicenna gives the following definition for sleep (rest) and wakefulness. Wakefulness is a state in which the '*nafs*' (most inherent spiritual particle endowed by Allāh (God) to every human being) employs all modes of sensory faculties. While the opposite is true for the state of sleep (Avicenna, 2006, p. 165). In his view, instinctual fervor is stopped due to sleep, different fatigues obliterated and all natural faculties are reinforced.

Today, it has been proved by researchers that sleep restores bodily functions (brain), reinforces the immune system, and raises bodily powers in reacting to stressful situations. The sleep process helps regulate emotions, integrate memories and thoughts, as well as concentration and communication with others. It reinvigorates all diminished physical and mental faculties (Cirelli et al., 2017). Sleep researchers believe that not getting an adequate amount of sleep brings about disruption in proper thinking, weakens one's spirituality, and increases stress and anxiety. All these factors result in an individual's ill-temper and wrathfulness.

Scientific evidence discloses the fact that inadequate sleep affects the body's internal workings in different ways. The impact ranges from disruptions in the formation of neural transmitters to causing disturbances in connections between nerve cells, and, as a consequence, one's concentration. In contrast, having adequate sleep is associated with the brain's better functioning and health, increase in concentration, reinforcing creativity and memory retention. All in all, the aforementioned arguments

for getting sufficient sleep prepare and assist the individual to cope more effectively with struggles in different areas of life (Sansone, 2010, p. 975).

In Avicenna's published works, he underscores the role of having adequate amount of sleep on one's health. The harm done to the body as a result of under-sleeping or oversleeping is precisely stated. He maintains that too much sleep is detrimental to the body because it disturbs the brain's temperament, causing it to dry up and get enfeebled. As an unpleasant outcome, the brain's functioning gets disrupted (Avicenna, 2010, Vol. 1, p. 398). If the individual's brain is hot by nature, the drying up of its temperament – as a result of sleeplessness or too little sleep – causes the individual to either dither or act hastily in starting work. If the brain's dryness is accompanied by coldness, the individual feels lethargic and indolent all the time (Avicenna, Vol. 3, pp. 20-23).

As sleeplessness or too little sleep has its own effects on an individual's mood and spirit, oversleeping causes its own damage to the body. In this regard, Avicenna gives the following explanations: Too much sleep blunts '*nafs*'-related faculties. It makes the brain heavy, causing disruption in the digestion process (Avicenna, Vol. 3, p. 218).

Sleeping for too long causes body to generate unnatural heat which dominates the body's temperament (Avicenna, Vol. 3, p. 217). When hotness dominates the body temperament, the following features and traits are among those expected to happen: "extreme wrathfulness", "restlessness", "immodesty", "ruthlessness", "agility", and "non-passiveness" (Avicenna, Vol. 3, pp. 277-278).

If the individual who is asleep is hungry, and goes on sleeping for a long time, his temperament becomes severely cold (Avicenna, 2010, Vol. 1, p. 217). The latter action, if continued by the individual on a regular basis, he/she develops the following mood or moral characteristics: They become "too laid-back and easy-going", "lazy", "slow-witted", "cynical", "hopeless", and "passive" (Avicenna, 2010, Vol.1, pp. 277-278).

Sleep as a natural process, causes the retention of certain materials that need to be excreted (Avicenna, 2010, Vol.1, p. 217). But, if the sleep process continues for a long time (and the materials which need to be discharged are retained for too long in the body), the temperament of moisture and hotness increases (Avicenna, 2010, Vol.1, p. 233). This action, if repeated over and over again, causes moisture and heat to overcome the temperament. An increase in heat and its dominance in one's temperament brings about moral moods and characteristics referred to in the paragraph above. Moreover, an increase in body moisture causes the individual to develop transient passive episodes (Avicenna, 2010, Vol. 3, pp. 277-278).

Avicenna regards sleeping during daylight hours as detrimental to health giving rise to the development of moisture-related illnesses, catching colds, and skin discoloration. This kind of sleep affects the spleen, induces indolence, and suppresses the appetite, paving the ground for developing a fever. As a matter of fact, night sleep is commendable in that it is consummate, proportionately heavy, and free from interruptions (Avicenna, 2010, Vol. 1, p. 398).

In the above paragraphs, it was demonstrated that Avicenna thinks sleep, like nutrition and exercise, directly impacts the internal workings of the body. That is, sleep, by influencing body temperament, brings about considerable changes in a person's morality.

It is interesting to note that a research work completed by Wytykowska comes to the following conclusion: He states that individuals who have near-identical temperaments are very similar in terms of moral features. He emphasizes that with regard to changing one's temperament, it is possible to devise quite effective methods so that individuals become capable of controlling their despicable moods and morality (Wytykowska, 2012).

In the same vein, Julian and James express that giving particular attention to health philosophy can bring about a merger of physiological, moral, and behavioral factors. This will benefit both the individual and the society. In their research, they have elaborated on ways of gaining good health and protecting and preserving it (Julian & James, 2020). The above discussion was intended to clarify that human beings – as is referenced in Avicenna's writings – can and should observe the afore-mentioned beneficial points and instructions. That is, they should attempt exercise proportionate to their physical conditions. They should also select the best food program in terms of their temperaments. Individuals ought to regulate their wakefulness and rest/sleep hours tailored to their physical body coordinates. Following this procedure, they can be successful at moderating their temperaments. In consequence, they can achieve and develop praiseworthy and commendable behavior and moralities.

The stability or change in moral characteristics is determined by continuity and consistency shown by the individual in observing the threefold program of nutrition, exercise, and sleep. This means if the given instructions are adequately followed for long periods of time or at close intervals, stable and enduring moral behavior is to be expected. If the recommended procedures and instructions are insufficiently executed and for short periods of time or at far-apart time intervals, the acquired moral and behavioral habits would be transient and unstable. And unlike the first

scenario, changes or obliteration readily occurs in the acquired habits.

Today, some researchers have attempted to investigate the concept "temperament" based on the modern science of medicine. The concept is researched and hypothesized from four different perspectives. They are: 1) Blood acidity or pH function, 2) Parathyroid glands functions, 3) Water electrolyte balance and kidney function mechanism, and 4) Hormonal nervous system function (Neuro-endocrine). It is maintained that hormonal nervous system characteristics (or the 'autonomic nervous system'), compared to the three other perspectives, bear higher similarity to the 'temperament' concept in ancient medicine. Even, it is claimed to be the equivalent of 'temperament' in medieval medicine (Shahabi & Ahanchi, 2008, pp. 8-9). Therefore, studies related to moral and bodily structures and dispositions utilizing modern science of medicine are a completely feasible endeavor. The spread of historical medicine approved by the findings of the modern medicine should solve a range of issues in the field of moral upbringing. That is, relevant authorities should take measures to apply upbringing methods and principles proportionate to each individual's—not everyone's in general—physiological characteristics. In this connection, it is certainly most beneficial that, as a first priority, 'parents' and at the second step, 'behavioral coaches,' get themselves acquainted with various human temperaments. In this way, they are able to successfully navigate through the task of moral teaching and training. Taking this measure creates the required conciliation and congruence between parents' and coaches' expectations of children's performance in school. It is suggested that this line of research be adopted by those interested in the field of training and nurturing the moral identity.

Conclusion

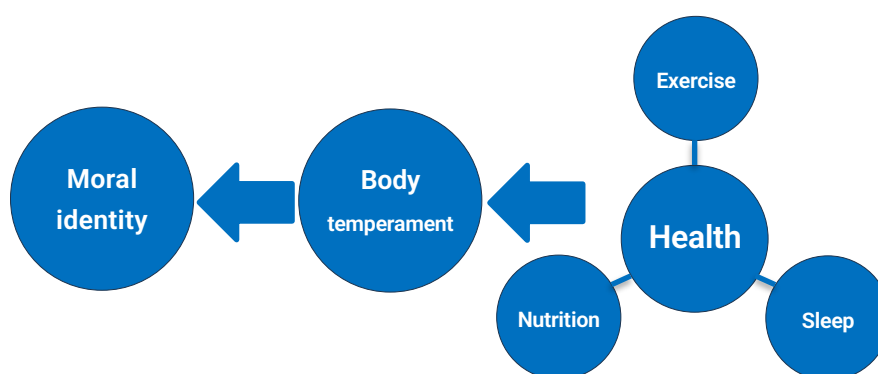
1- In the present article, it was demonstrated that in Avicenna's anthropology (in a restricted sense of studying the physical and spiritual characteristics of human beings), there is a direct relation between one's state of health and development or change in moral and behavioral traits. Good health, which results from temperament moderation, gives rise to admirable moral characteristics. The more the person is distanced from moderation in temperament, the more likely he is to go to extremes (deficient or excessive reactions). This paves the way for the development of contemptible moral traits.

2- Being aware of the effects the body has on the temperament teaches those who seek moral virtues the following lesson:

As long as you don't avoid the factors that disturb the equilibrium of your body temperament, you cannot expect to achieve your intended goals. Exercise, nutrition, and sleep are among the most crucial factors whose effects on good health were illuminated in this article.

3- From Avicenna's point of view, in order to attain moral elevation, recognizing the type of bodily temperament is necessary. The guidelines he gives in his book, *al-Qānūn fī-l-Ṭibb* (The canon of medicine) are highly advantageous. Also, initiating sports and physical activities – along with consuming temperament-balancing foods – should be considered. Foods whose temperaments/natures are against the dominant bodily temperament work most effectively in restoring body balance. And the foods whose natures are like those of the body increase the chances of the body deviating from a balanced temperament. (To take an example, for those with a melancholic temperament, cold and moist foodstuffs help restore the body balance). Too great an amount of sleep or wakefulness brings about temperament imbalance. As a consequence, a despised morality is generated.

4- In Avicenna's philosophical system, the relationship between the body and '*nafs*' (the most inherent immaterial and spiritual aspect of all human beings) is clearly asserted. That is, regulating the triple components (discussed above) in relation to the body – besides making physical body healthy-has the resultant benefit of a healthy '*nafs*' and soul. Temperament balance is an indication of bodily health. Being adorned with moral virtues and keeping away from despised moods and habits indicates a healthy '*nafs*'. An individual moral identity is the outcome of the entirety of all the factors referred to above. The effects of the triple factors on moral identity are displayed in the following diagram.



Picture No 3: The Effect of Health on Moral Identity

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▣ Conflict of Interests

▣ The authors declare no competing interests.

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