

MODEL OF RELATION BETWEEN TEMPERAMENT AND TRAVEL MOTIVATION IN TOURISM

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Abstract

Despite the extensive studies about the tourists' motivation, there is not still a unified model for motivations. Since temperament has a macro nature and represents the qualitative and quantitative aspects of behavioral and ethical dimensions, it seems to be an appropriate representative to recognize the tourists' behavior to evaluate their motivation for travel. Therefore, this research was conducted for the first time aimed to find a relationship between the qualities of people's temperament and their tendencies for travel motivation.

The findings of research show that people's tendencies to the components of travel motivation are different based on their temperament' qualities.

Keywords: Tourist, Travel motivation, Tourist behavior, Temperament.

INTRODUCTION

Every discussion on tourism, in particular tourism planning, begins with a study on tourist behavior (Bansal and Eiselt 2004). Travel motivation has always been a basic part of the dynamic trend of tourist behavior, which has been significantly considered by tourism researchers since the 1960s (Li and Cai 2012).

Fodness (1994) believes that motivation is a vital variable to understand the tourists' behavior because it is the driving force of all behaviors. To Wahab (1975), travel motivation is a major topic in tourism studies and is considered as a basis for tourism development (Pearce, 2017).

The study on tourist motivation is important in predicting future patterns of tourist behavior. It

is also important as a marketing necessity and tourism development planning. Influenced by motivations, tourists have different expectations from tourism products. The differences in motives clarify the need for the planners' and tourism trustees' awareness and knowledge of these characteristics. As mentioned, tourist motivations are always considered as an important element of the dynamic process of tourist behavior. Many theories have been proposed in this field such as Sociological Theory of Tourism Motivation (Cohen 1972), Adventurous and Conservative Theory (Plog 1974), Conceptual Framework of Tourists' Recreational Motivation (Crompton 1979), Optimal Arousal Theory (Pearce 2013), Social Psychological Model of Tourism Motivations (Iso-Ahola 1982), Recreational Motivation Scale (Beard and Ragheb 1983),

Journey Ladder (Pearce 2012), Destination Choice Theory (Mansfeld 1992), Journey Pattern (TCP) (Pearce and Lee 2005) (Mirzaei, Nasiri, and Mira 2015).

Researchers develop and experimentally measure tourism motivation scales (Ying et al. 2018). They have examined the relationship between tourism motivation and behavioral structures such as mental well-being (Kim et al. 2015), behavioral intent (Lu et al. 2016), destination loyalty (Sato et al. 2018), and market segmentation (Wen and Huang 2019).

Studies suggest that despite success in understanding travel motivation, there is still no fully agreed theoretical or conceptual framework (Li and Cai 2012). Extensive studies have been conducted in this field and different models have been proposed, however, there is not a conceptual framework accepted by different cultures correctly identifying and evaluating the tourists' motivation due to cultural differences, the wide range of human needs, and the universality of the subject.

In fact, recent studies argue that no single model can adequately explain the process of tourist destination selection and travel behaviors, and provide a new integrated view of existing psychological models. This suggests that we need a more comprehensive understanding of the tourist's behavior in the field of tourism. Hence, "the common sense in understanding the tourists motivations should be discussed through an interdisciplinary approach not defined in discrete models"(Yoo, Yoon, and Park 2018).

To fill this gap, the present study evaluates an integrated model of mood factors affecting the tourists travel motivation to achieve a single model of tourist behavior.

People with different mental, physical and behavioral characteristics have different motivations to travel. Temperament, which is one of the main concepts of traditional Iranian medicine, includes the mood and physical characteristics of each person. It offers a regular division of human beings based on the warmness, coldness, wetness, and dryness attributes)Ibn Sina (2008), p. 28; Quoted by

Zarghami·Esmail, Dadras·Fayzeh, and Yekta·Nafiseh (2017)(

According to Islamic-Iranian medicine, Temperament is one of the basic individual characteristics of the human body with apparent effects on mood and affects behavior (Jorjani·Ismail (2001): 154; quoted by Bazargani, Hakemi, and Tafaghghodi (2018)).

Temperament is diagnosed based on various factors such as body, touch, sleep, hair, etc (al-Dimashqi (2001)quoted by Zarghami·Esmail, Dadras·Fayzeh, and Yekta·Nafiseh (2017)). The lack of a criterion with a macro and universal temperament to identify the motivations of tourists represents the general and qualitative aspects of their mood and behavior and causes the main motives or reasons of travel to be hidden. Moreover, if ignored, a lack of proper response to expectations will be resultant. Thus, a lack of tourism development and the effect of Temperament on travel motivation has been considered. The use of the Temperament factor in assessing travel motivation is considered in both theoretical and methodological aspects. Theoretically, measuring travel motivations through Temperament allows the researchers studying the behavior of tourists to use a holistic approach to diagnose the tourist behavior and accordingly evaluate the travel motivations. Methodologically, in the questionnaire tests used to determine the tourists' motivations for traveling, the respondents are involved in the social process of maintaining good interaction with the interviewer, and their answers are influenced by circumstances, situations, and their mood. Thus, it is sometimes not possible to get accurate information about their motivation for traveling. Also, according to Dan's research, people do not have comprehensive knowledge about their motivation to travel (Pearce and Lee 2005). These topics draw attention to temperamentology researches on determining the tourists' behavior. The reason is that the evaluation of tourist behavior through temperament which is determined with physical and psychological symptoms by researchers is observational and has less error.

In this paper, the relationship between the Temperament qualities of people and their tendencies to travel motivation as a component of determining tourist behavior is studied.

Accordingly, the present study deals with the relationship between Temperament and travel motivation.

Literature Review

The main theory of motivation represents a dynamic process of inner psychological factors (needs, wants, and goals) leading to an unpleasant level of stress in the individuals' minds and bodies. Stress from inner needs directs one to actions designed to relieve stress and meet the needs. In tourism and travel literature, tourism motivation is described as a determining factor of tourism activities according to I) reasons for travel, II) choice of a specific destination, and III) travel satisfaction (Blanco et al. 2003). Pearce defines travel motivation as a force driving travel behavior (Pearce and Lee 2005). Tourism motivation is also defined as a factor in predicting loyalty to the destination (Prayag and Lee 2019). Discovering the tourists' motivations helps the tourism researchers to understand the tourists' needs and enables them to accurately match the types of tourism with different features of the destination (Albayrak and Caber 2018). Other researchers, have indicated that studying tourism motivation may be a key to attract more visitors, meet the needs of current visitors, and understand the factors influencing the traveler's decisions (Cha, McCleary, and Uysal 1995). In this regard, measuring the tourists' motivation has a vital role in satisfying the current visitors, attraction of more visitors, prediction of future demand, and development of tourism products to meet the tourists' needs (Wolfe and Hsu 2004)

Temperament

In ancient medicine, philosophers believed that the universe consisted of four elements (fire, air, water, and soil). Elements are the basic components of the universe that creatures and universes, sounds, behaviors, temperaments,

and all the abilities and qualities come from the combination of these elements (Nasr (2009): 229; Quoted by Tafti·Mohsen et al. (2018)). By term, Temperament is an infinitive and means mixing and blending. In Iranian medical sources, temperament as a specialized term refers to one of the principles of medicine, which means the quality of the composition of the organisms' components including the human body (Heravi (2008)Quoted bySalmannejad et al. (2016)). In Iranian medicine, the result of many mental and physical characteristics of human beings and even other creatures and phenomena is evaluated in the form of two ranges of warmth, coldness, wetness, and dryness qualities. Ibn Sina, in the definition of temperament, says: "Temperament is a quality that arises from the interaction of small opposing components. During this interaction, a part of one or more substances mixes with a large part of the opposite substance (s), interact with each other yielding a similar quality, which is called temperament" (Ibn Sina (1988): 19; Quoted byTafti·Mohsen et al. (2018)). The basic components of each body are composed of the basic elements, known as the four elements including the elemental fire with hot and dry quality, the elemental air with warm and wet quality, the elemental water with cold and wet quality, and the elemental soil with cold and dry quality. Each of these elements causes the emergence of qualities called the quadruplet qualities including warmth, coldness, wetness, and dryness (Jurjani (1976); Ibn Sina (2004); Ahwazi (1877) ; Zakaria (1987) ; Aghili khorasani and Khan (2006) ;Quoted by Mojahedi et al. (2012)). Warmness-coldness of temperament affects the human motivational forces against the environmental stimuli more than the active aspect. Moreover, dryness-wetness of temperament is more effective than the passive aspect. Ibn Arabi mentions these two general qualities as natural fathers and natural mothers. Natural fathers (warmth and coldness) show a range of activeness and natural mothers (dryness and wetness) represent a range of passiveness on the human body, mind, and soul (Malekshahi·Hassan (2011): 131; quoted by Tafti·Mohsen et al. (2018)). According to this approach, people are

different from each other in terms of temperament qualities, and people have significant differences from each other in each society, which are defined in terms of warmth, coldness, or wetness and dryness ((Yousefifard et al. 2013; Heravi 2008); Quoted by Mojahedi et al. (2012)). Regarding temperament, the traditional doctors tried to classify the physical and mental interactions of human beings on the basis of appearance (phenotypic) similarities to predict an individual's behavior (Arzani (1882) ; Yousefifard et al. (2013)). The number of possible temperaments includes four singular states (warm, cold, wet, dry) and four mixed states (warm and wet, warm and dry, cold and wet, cold and dry), and one moderate state. Every human being is placed in one of these groups according to the dominance of different qualities and the manifestation of symptoms in physical and mental characteristics, which is called general temperament (Upur and Yusup (2003); Quoted by Mojahedi et al. (2012) Each person, having a unique temperament, is in one of these nine groups, among which, one is moderate and the other eight groups are non-moderate including four simple or singular temperaments (hot, cold, wet, and dry) and four compound temperaments (warm and wet, warm and dry, cold and wet, cold and dry) (Mojahedi et al. 2012). According to the basics of traditional medicine, temperament is determined using ten variables of tactile states, body, hair, body color, body size, speed of being affected by qualities (warmth, cold, wetness, and dryness), speed of actions, quality of feces, the amount of sleep and awakening, and psycho-nervous state (Chaghmini (1988); quoted by Yousefifard et al. (2013)). The more warmness in temperament, the greater the movement in human behavior and actions, and the person has more activeness in relation to the environment or whatever it encounters. The more the cold element or quality prevails in the mood, the person has more stillness and impact. Similarly, the higher quality of wetness denotes the greater the passivity and acceptance of new faces in it, and the higher quality of dryness in the temperament represents the less passivity)

Malekshahi·Hassan (2011); quoted by Tafti·Mohsen et al. (2018)). For example, stubbornness and anxiety are characteristic of dryness. Plasticity, which is a sign of high passivity, causes quick understanding and quick forgetting or being easily affected by environmental forces. The warmth of temperament causes a lot of mobility and vibrancy in actions, talkativeness, strong social relations, and extroversion in personality and behavior, and the coldness of temperament causes a decrease in mobility and movement, slowness and lethargy (Tafti·Mohsen et al. 2018).

Warmness: It is resultant from natural movement and leads to porosity and consequently lightness. Warmness is the quality of activity and a sign of movement and change. Increasing warmness means increasing change in all its forms., change and movement of place, movement of qualities and mental movement, changes in circumstances caused by perceptions, and so on. Warmness is the intoxication of material life, then it brings the qualities that material life demands. Therefore, heat, lightness, and movement are related to the quality of warmness (Imanieh and Salehi 2013).

Coldness: Coldness is also the quality of activity, which affects the other qualities. However, it comes from natural stillness and causes depravity and heaviness. Coldness is a sign of reduced movement and changes, as a result, the creature or body becomes heavy.

Dryness: It is a quality that causes hardness to join, hard to break, and natural hardness and coarseness, and slow formation. Dryness quality brings with kind of inner strength, rigidity, dependence, and astringency.

Wetness: It is a quality that causes easy joining and breaking easy acceptance and loss (easy passivity), easy formability, and natural softness and tenderness (Ibn Sina (2004); Naseri·Mohsen et al. (2009); Quoted by Abdulzadeh (2016)(

Table 1. The features of the four elements (Yousefifard et al. 2013)

Element	inducer feature	temperament	weight	Symptom
earth (soil)	cold and dry	stability	absolute heavy	extreme rigidity and dryness
Water	cold and wet	softness	relative heavy	extreme cold
Air	warm and wet	lightness, softness, permeability	light	extreme wet and smooth
Fire	warm and dry	maturity, tenderness, lightness and	very light	extreme warm

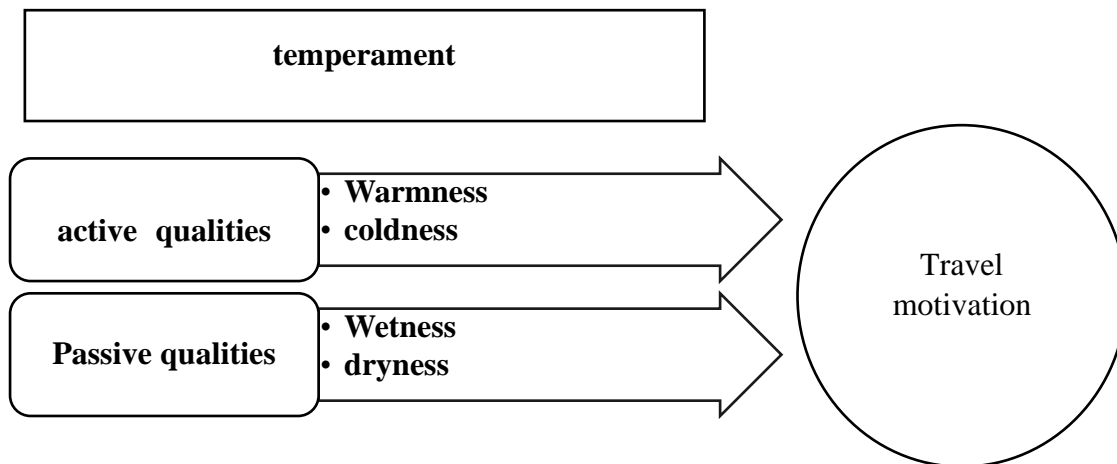
Relationship between Temperament and travel motivation

Temperament teachings and findings of modern sciences in personality psychology indicate a broad relationship between these two fields of knowledge. For example, Powell, Kerchmer, and Sheldon in typology established a relationship between temperaments and physical-mood characteristics with different approaches (Shamloo·Saeed 2003). In a study, David Kirsey introduced the logical, idealistic, supportive, protective, and industrialist personality types in proportion to the four main temperaments (Keirse and Keirse 1998). The components of the neuro-biological model Cloning (1994) have been introduced in the latest research on personality typology in relative conformity with the four temperaments (Kaplan and Sadock 1988). Regarding the personality traits, Kant (1974) defined each temperament in a range of personality traits of activity and emotion Wundt (1886), based on the emotion and variability Eysenck (1985) with introversion-extroversion and the degree of excitement (Tafti·Mohsen et al. 2018).

Bright (2009) believes in tourist motivation as a very complex field of research in the framework of psychological theories (Albayrak and Caber 2018). In tourism studies, travel is examined as a reflection of personality (Yoo, Yoon, and Park 2018). Thus, temperament, which is related to personality represents the general and qualitative aspects of the mood and behavior of individuals. It can be used in travel studies, in particular, "the travel motivation stimulating and guiding travel behavior" (Iso-Ahola 1982). According to the study of the temperamental principles, the elements affect the psychic spirit and cause general qualities in the perceptual powers (appearance and inner senses) and motivational powers (stimulation and response). Moreover, the quality in the human powers creates stable patterns in actions and behaviors (Tafti·Mohsen et al. 2018).

Conceptual Model of Research

Fig.1.1. The conceptual model of research by (Pearce and Lee (2005) ; Ibn Sina(1988))



Methodology

Survey Tool

This is a descriptive-survey study in terms of method and applied in terms of purpose. The statistical population of this study consisted of domestic tourists aged 20 to 60 years old traveling to Isfahan who was cyberspace users and available to the researcher at the time of completing the questionnaire. A sample with 384 people was selected from this community. Cochran's formula was used to determine the required number of samples. Based on this model, according to Krejcie and Morgan's table, the statistical sample size with an error of 0.05 was 384. About 460 questionnaires were distributed non-randomly and online among tourists in April and May 2016, and 460 questionnaires were returned, of which 450 were analyzable. The research method used in this study was descriptive and inferential statistics and data analysis was performed using SPSS software.

The hypothesis was that people with different temperaments show different tendencies to the components of travel motivation. To test this hypothesis, two questionnaires were used to ensure the relationship between human temperament differences and their tendencies to the found characteristics. The first questionnaire (standard medical questionnaire) was used to assess the qualities of tourists' temperament and the second questionnaire was

utilized to evaluate their tendency to seven components of travel motivation.

Proceedings

The scale used to answer the questions is the 5-point Likert scale, which is one of the most common measurement scales. Standard temperament questionnaire was used in three categories of sanguinegraphic questions including 15 specialized questions, specialized questions related to warmness-coldness qualities, and five specialized questions related to wetness-dryness qualities taken from Salmanezhad et al. (2018)(Appendix 1). Also, in the semi-structured travel motivation questionnaire, the first part is related to sanguinegraphic questions and the second part is related to travel motivation with 31 items adapted from Pearce and Lee (2005). It assesses the motivational factors influencing the choice of Isfahan city (Appendix 2).

The similarity of the first questionnaire was calculated through Cronbach's alpha and retest with the values 0.69 and 0.74 and ICC from total scores of two stages 0.91 (0.841-938). It indicates the necessary reliability of the questionnaire. Also, the values of $CVR > 0.49$ and $CVI > 0.79$ were confirmed in the temperament questionnaire, thus, the questionnaire had sufficient validity (Salmanezhad et al. 2018).

The sensitivity and features of the specified sections for the scores of the questionnaire are presented in Table 2.

Table 2. The sensitivity and sections' feature (Salmanezhad et al. 2018)

%68	%71	50	warmness	wetness-dryness
%58	%74	14	wetness	
%69	%71	16-15	mood	
%85	%78	17	dryness	

Feature	sensitivity	Score	section	sub scale
%57	%80	46	coldness	warmness-coldness
%71	%63	49-47	mood	

The reliability of the travel motivation questionnaire was confirmed. All these coefficients were higher than 0.7 indicating the reliability of the measuring tool.

Table 3. Determination of Cronbach's alpha of questionnaire variables

variable	Stimulation	strength of relationships	nature	Isolation	nostalgia	autonomy	self-actualization
Cronbach's alpha value	89.0	83.0	92.0	81.0	92.0	85.0	89.0

The validity of the questionnaire was confirmed by professors and tourism experts in terms of form and content.

actualization			
travel motivation	132.0	001.<0	Confirmed

Findings

According to the descriptive statistics, of 384 participants, 62% of the sample members were female and 38% were male (Table 4-1). In terms of education, 2% of respondents had a diploma degree, 13% associate degree, 38% bachelor degree, and 25% had a master and Ph.D. degree (Table 4-2). In terms of age, 62% of respondents were between 20 and 30 years old, 29% of respondents were between 30 and 40 years old, 7% were between 40 and 50 years old, and 2% of the respondents were between 50 and 60 years old. Information on sanguinegraphic characteristics is presented in Table 1.

Table 4. The results of correlation between travel motivation and warmness-coldness

Variables	Coefficient	significance level	Result
Stimulation	139.0	001.<0	Confirmed
strength of relationships	185.0	001.0	Confirmed
Nature	011.-0	827.0	Rejected
Isolation	118.-0	001.<0	Confirmed
Nostalgia	120.0	001.<0	Confirmed
autonomy	054.-0	289.0	Rejected
self-	155.0	001.<0	Confirmed

Pearson correlation test (Table 4) showed that there is a positive relationship between travel motivation and coldness-warmness ($p < 0.05$) indicating that the more people temperament tends to warmth, the more travel motivation they have. The intensity of the correlation between travel motivation and coldness-warmness is 0.132. Also, there is a relationship between the five components of stimulation, strengthening relationships, isolation, nostalgia, and self-actualization with coldness-warmness. The relationship between isolation and coldness-warmness is negative while it is positive with other relationships. Among the components, the strongest relationship with coldness-warmness is related to the strength of relationships with an intensity of 0.185.

Table 5. The correlation between travel motivation and dryness-wetness

Variables	Coefficient	significance level	Result
mobility and stimulation	028.-0	580.0	Rejected
strength of relationships	029.-0	569.0	Rejected
Nature	123.-0	016.0	Confirmed
Isolation	071.-0	164.0	Rejected

Nostalgia	138.-0	007.0	Confirmed
autonomy	017.0	732.0	Rejected
self-actualization	034.0	509.0	Rejected
travel motivation	082.0	110.0	Rejected
correlation between coldness-warmness and dryness-wetness	105.0	040.0	Confirmed

Pearson correlation test (Table 5) showed that there is no relationship between travel motivation and dryness-wetness and the two variables are not significantly related to each other ($p < 0.05$). The findings of the correlation test showed that only two components of nature and nostalgia are related to dryness-wetness, which is negative for both relationships. This indicates that the more people temperament tends to be wet, the more they are motivated to travel. The intensity of correlation between nature with dryness-wetness is -0.123 and it is -0.138 with nostalgia.

There is also a significant relationship between coldness-warmness and dryness-wetness ($p < 0.05$). As people's temperament tends to be wet, their nature tends to be slightly dry with the correlation intensity of 0.105 .

Analysis Of Other Research Findings

In this study, the relationship between temperament qualities and travel motivation in temperament groups was examined. The results of the ANOVA test showed that the mean of travel motivation was significantly different between different temperaments ($p < 0.05$). The mean of the components of travel motivation shows that there is no difference between different temperaments only in the component of autonomy. There is a difference between different temperaments among the other six components (mobility and motivation, strength of relationships, nature, isolation, nostalgia, and self-actualization).

Table 6. ANOVA test to examine the mean of travel motivation and its components based on the type of temperament

type of temperament	Number	Stimulation	of strength relationships	Nature	isolation	nostalgia	autonomy	self-actualization
Warm and wet	63	4.34	3.92	4.58	4.84	4.47	3.98	3.99
Warm and dry	55	4.15	4.09	4.35	4.61	4.08	3.47	3.99
Cold and wet	76	4.13	3.76	4.22	4.74	4.37	3.36	4.10
Cold and dry	38	4.04	3.74	4.10	4.70	4.32	3.05	4.00
Temperate	22	4.01	3.55	4.40	4.41	4.15	3.93	3.64
Warm and temperate	42	4.07	3.74	4.42	4.44	4.14	3.38	3.72
Cold and temperate	30	4.13	3.83	4.26	4.66	4.38	3.57	3.86
Wet and temperate	36	4.18	3.80	4.45	4.73	4.22	3.85	3.85
Dry and temperate	22	4.08	3.52	4.37	4.56	4.30	3.23	3.92
ANOVA test	384	007.0	001.0	001.<0	006.0	<0.001	222.0	006.0

In terms of mobility and motivation, warm and dry temperament (biliary) has the highest meanwhile dry and temperate temperament has the lowest mean. Regarding the component of the strength of relationships, the highest mean is for warm and wet temperament (sanguine) and the lowest mean is related to cold and dry temperament (melancholy). In the nature component, the highest mean belongs to the warm and wet temperament (sanguine) and the lowest mean belongs to temperate temperament. In the isolation component, the highest mean is related to warm and wet temperament (sanguine) and the lowest mean is related to warm and dry temperament (biliary). Also, in the nostalgia component, the highest mean belongs to warm and wet temperament (sanguine) and the lowest mean belongs to the cold and dry temperament (melancholy).

Discussion

This study was conducted for the first time to find the relationship between people's temperament qualities and the type of their tendencies to travel motivation. In general, the findings support the proposed model and show a positive effect of mood qualities on travel motivation. The following sections discuss these results in detail.

Table 7. The summary of hypotheses test

Hypothesis	Test
There is a significant relationship between the warmness of people and travel motivation.	Confirmed
There is a significant relationship between the coldness of people with travel motivation.	Confirmed
There is a significant relationship between the temperament of people and travel motivation.	Rejected
There is a significant relationship between the dryness of people with travel motivation.	Confirmed

According to the results of this study, the difference between two qualities of temperament (warmness-coldness) and (wetness-dryness) differentiating temperament

groups, can cause differences in people's tendencies to travel motivation.

Conceptual Model of Research After Coefficients' Significance

Findings showed that the warmer the temperament of people, the more motivated they are to travel. Travel means movement and warmness also causes movement, then with increasing body temperature, the travel motivation also increases. The higher the warmness temperate, the greater the motivation to move and travel. No researches were found directly related to the subject of the present study. However, Eysenck (1985) explaining the personality traits of introversion-extroversion and excitability-emotional stability in proportion to the four temperaments indicated that there was a relationship between warmness-coldness temperaments and the introversion-extroversion. Therefore, warm temperaments extroverted personality traits while cold temperaments introverted personality traits. His findings show that a low level of cerebral cortex in warm-tempered people causes them to need more activities, emotions, and stimuli (Tafti-Mohsen et al. 2018). His results also confirmed the hypothesis test of a significant positive relationship between warmness with the component of stimulation, which is consistent with the results obtained from the first hypothesis of this study. Therefore, experts in the field of tourism planning and marketing should note that tourists with a warmer temperament are more inclined to discover the unknowns and gain new experiences while traveling and want to participate in risky activities. These tourists prefer unusual destinations and recreational activities with challenges and excitement.

Warm temperament also leads to a greater tendency to strengthen relationships. The results of Hans Eysenck confirm the relationship between warm temperament and socialization, which is closely related to the component of the strength of relationships. This is therefore consistent with the findings of the

first hypothesis of this study. Socializing and interacting with companions and the host community are among the priorities of tourists with a warmer temperament. It seems that these people prefer group trips to individual trips. For these people having a companion and not being alone on the trip becomes more necessary. These tourists want to spend time with friends, companions, and relatives and meet new people as a pleasure. Then, their travel planning should make a situation for interaction and communication with friends and the community.

McCrae and Costa (2003) also studied the five main factors of personality Eysenck (1985) and assessed personality traits in proportion to the four temperaments. It is indicated that there is a positive significant relationship between coldness and isolation and reluctance to be the center of attention. This is the most relevant personality trait to the isolation component, in a way that with increasing coldness, the tendency to isolation increases. This confirms the negative relationship between isolation and warmth. Increasing the coldness leads to a greater tendency to isolate and reluctant to be the center of attention, just as water freezes and becomes frozen and immobile with increasing coldness. Tourists with coldness temperament seem to prefer solo travel. If they choose group travel, they have limited contact with their companions and the host community. They are reluctant to engage in group activities and avoid crowded destinations. Therefore, in planning a trip for this group of tourists, it should be noted that they are more inclined to be alone and spend their time traveling while avoiding crowds. Besides, Yazdanfar et al. (2015) investigated the relationship between differences in human temperament and the type of their tendencies to architectural features. Their results showed that there is a positive significant relationship between warmth and tendency to nature, in such a way that the increase of temperament causes more tendency towards nature. While the results obtained from this study do not confirm such a relationship. Moreover, the results obtained from the first hypothesis of this study are not consistent with the findings of the study by Yazdanfar et

al.(2015) .The reason for this seems to be related to the difference between the concept of nature in architecture and tourism. In the sense of travel motivation, nature can be defined as a set of needs leading a person to travel for "direct enjoyment of some relatively untouched phenomena of nature" (Mehmetoglu and Normann 2013). While nature in architecture is a model for design (Daneshjoo, Mirhosseini, and Mahdavinejad 2015).

Also, increasing the temperament increases the tendency to nostalgia and raises the sensitivity of this group in the need to associate memories in travel. Therefore, destination communities and tourism marketers can influence tourists with warmth temperaments by designing and offering tourism products and services with a nostalgic structure reminiscent of the past. The increased warmth also leads to a greater tendency to self-actualization.

The effect of increasing heat or warmth can be considered similar to Maslow's hierarchy of needs theory. As a humanist, Maslow believed that people are motivated to meet their basic needs first and then to meet more advanced needs. Maslow stated that people have an innate desire for self-actualization. Since self-actualization is at the top of Maslow's pyramid, one can achieve self-actualization as a higher need by satisfying and distancing from material needs and lower levels (Mahdavi and Sadeqi 2019). Therefore, the direction of the hierarchy of needs in Maslow's pyramid can be compared to the movement of the fire element. As the fire element in nature is always moving up, the presence of this element in human beings by transferring heat and warmth causes the tendency of people to go beyond the material and move towards spirituality. The increased temperament causes people to go beyond the objective and seek to discover the truth of life and understand the true meaning of phenomena. People with warmer temperaments travel with more developed motivations to meet higher needs and use traveling as an informative tool to reach their perfection and sublime truth. In planning travel for these tourists, these people tend to go sightseeing that leads to a sense of excellence, then an effective

platform should be provided to convey deep concepts in travel to adopt a spiritual approach.

Regarding the effect of coldness on travel motivation, the findings showed that coldness affects travel motivation so that as people's temperament becomes colder, their travel motivation decreases. There is also a relationship between five components (stimulation/ strengthening relationships / isolation / nostalgia / self-actualization) with coldness. The relationship between isolation and coldness is positive while it is negative with the other relationships. There is no relationship between cold and nature and autonomy. There is no relationship between coldness with nature and autonomy.

Eysenck (1985) discovered a strong relationship between coldness and the component of stimulation and showed that cold-tempered people avoid excitement because the cerebral cortex has more arousal.

McCrae and Costa (2003) considered isolation and reluctance as the center of attention closely related to the coldness dimension. Moreover, isolation and reluctance as the center of attention are also similar to the isolation component, which may be related to the quality of coldness temperament. In the present study, this relationship was also confirmed. They also believe that there is a relationship between coldness and the socialization component, which is the same as the component of the strength of relationships. This result confirms the negative relationship between the strength of relationships and coldness. Yazdanfar et al. (2015) stated that there is a negative relationship between coldness and nature, which is inconsistent with the results of this hypothesis (there is no relationship between coldness and nature).

The results of this study also indicate a lack of significant relationship between dryness-wetness temperament and travel motivation. The findings showed that dryness-wetness quality affects only two components of nature and nostalgia. Badram et al. (2015) stated that there is a positive relationship between the dryness quality and the isolation. Moreover,

they found a negative relationship between the dryness quality with strengthening the relationship. While the test results of this hypothesis do not confirm their findings and show that the nature of dryness is effective only on two components of nature and nostalgia. Furthermore, the effect of dryness on nature is positive while it has a negative effect on nostalgia. Soil is the heaviest element in nature. The soil element with the transfer of dryness causes stability and inflexibility. Designing can be simply done over the soft soil, however, it is difficult to engrave a design on stone and clods. As people become more prone to dryness, their flexibility decreases and they can hardly be affected. While in the case of affectability, there will be a more lasting effect. Therefore, to plan and attract tourists with nature more prone to dryness, it should be considered that these people have less flexibility and can hardly be influenced. While in the case of affectability, there will be a more lasting impact. It also seems that tourists with dryness temperament are more inclined to travel to familiar destinations and enjoy the repetition of familiar activities during the trip. These people are very resistant to any change in the trip.

The soft soil mixes more easily with other elements; it becomes mud in the presence of water and moves by the wind, but rocks or clods are hardly affected by the other elements. Dryness in people makes them remember past events in detail. As the dryness increases, the durability of memories in individuals increases. Therefore, it seems that the association of memories in the travel of tourists with a more dryness temperament is important and the destination communities can satisfy them by creating events and providing a platform for meeting their past at the destination and satisfying them.

The findings also indicate that wetness temperament is effective only on two components of nature and nostalgia. The wetness temperament has a negative effect on nature and nostalgia. As the wetness temperament increases, the tendency to the nature component decreases while the tendency to the nostalgia component increases. Therefore, it seems that by increasing the

humidity in people, their desire for nature tourism and nature trips decreases. The results obtained from this study are inconsistent with the findings of Badram et al. (2015). Their results indicate that wetness quality is related to the component of isolation. It is negatively related to the component of isolation. Their research also showed a significant positive relationship between wetness temperament and extraversion Eysenck (1985). Wetness, in contrast to dryness, provides flexibility. The tourists with a more wetness temperament are more flexible, resilient, and are quickly affected by the environment. They can adapt to the new environment more quickly.

In general, among seven components of travel motivation, five components (stimulation, strength of relationships, isolation, nostalgia) are only affected by warmness temperament change and two components (nature and nostalgia) are influenced only by wetness temperament.

Conclusion

This novel study contains valuable tips for managers, planners, and tourism marketing professionals and can help and open horizons to understand the tourists' behavior. Confirming the effect of temperament qualities on travel motivation, the basics of Iranian medical temperament can be introduced as a new and efficient scale for segmenting the tourism market. In this way, along with the classic criteria used so far to segment the tourism market, tourism marketing professionals will be able to segment their market more accurately, and consistently by using temperament as an archetype based on the previous criteria. This will be a great help to revive and preserve traditional Iranian medicine, as technical and ancient knowledge. Also, planners and managers of the tourism industry will be able to accurately identify the needs of tourists by being aware of the qualities of tourists as a criterion with a macro nature and representing the general and qualitative aspects of the mood and behavior of tourists. They can also accurately identify the tourists' needs and help

them to design and equip tourism products and destination facilities in accordance with the tourists' expectations and needs. In this way, they should sustainably formulate their plans and strategies. This will increase the tourists' satisfaction and lead to the development of tourism effectively and sustainably.

Limitations and Futures research

There were some problems and limitations in conducting this study, some of which are mentioned in the following:

1. Jabali's temperament questionnaire is not standardized for all age groups.
2. All the natural temperaments were not included in the study field or the difference in their distribution in the field compared to the reality of society.
3. Many traditional first-hand sources were in ancient Persian or Arabic language, which made them difficult to use.
4. In this study, we had to use available sampling. The generalization of its results to the community is worth considering, however, this sampling through virtual networks was the only way to reach the community due to the prevalence of coronavirus.
5. This study was conducted on domestic tourists traveling to Isfahan. Its results cannot be generalized to foreign tourists.

Despite these limitations, this study can be significant in tourism and sustainable development studies as it provides a more comprehensive understanding of the tourists' needs by providing deeper information about the relationship between temperament and travel motivation. Therefore, using the model of this study, future researches can devote a wider range of studies to assess the tourists' needs.

According to the research process and its findings, some research suggestions are presented below.

1. Given that this is the first research, other researches in this field can be useful by changing the statistical population.

2. In this study, only seven factors of travel motivation were examined in Pearce's studies. Thus, in future researches, it can be examined the relationship between tourists' mood qualities and other factors of travel motivation.

3. In future studies, it is suggested to examine the effect of temperament qualities on travel motivation of tourists younger than 20 years old and over 60 years old to gain a better understanding of travel motivation in these age groups.

4. Investigating the relationship between temperament qualities and travel styles

5. Segmentation of tourism market based on the temperament qualities of tourists

6. Conducting studies in the field of designing tourism products and tours based on the qualities of tourists' temperament and its effect on their satisfaction

'Data availability statement'

The data that support the findings of this study are available from the corresponding author, [Maryam Dehdar], upon reasonable request.

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