



# The effect of hospitableness on positive emotions, experience, and well-being of hospital patients

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## ABSTRACT

The role of hospitableness in hedonic service settings has been subject to considerable theoretical and empirical investigation; however, its role in utilitarian service settings (e.g., hospitals) has received notably scant attention. Drawing on the stimulus-organism-response (S-O-R) model, this study proposes and tests a conceptual model linking hospitableness, patient experience, positive emotions, overall satisfaction, subjective well-being, and recommendation intention. Drawing on quantitative data ( $n = 204$ ) collected from inpatients in hospitals, the findings largely support the proposed theoretical model and confirm that hospitableness can positively influence patient experience and positive emotions, but not overall satisfaction. Interestingly, while hospitableness does not seem to directly influence overall satisfaction, this effect is indirectly achieved via patient experience. The findings also reveal that patients' subjective well-being may be enhanced by positive emotions but not overall satisfaction. Both positive emotions and overall satisfaction have a positive effect on recommendation intention. The study makes several theoretical implications and proposes significant practical implications both for the hospitality and healthcare sectors.

## 1. Introduction

The role of hospitality services in fostering favorable social outcomes such as belongingness and subjective well-being and mitigating negative social outcomes such as loneliness and distress is widely acknowledged (Song et al., 2018; Altınay et al., 2019; Farmaki and Stergiou, 2019). Previous research addresses this role by drawing on various psychological theories including the theory of arousal, the conservation of resources theory, and the bottom-up spillover theory (Anasori et al., 2021; Kim et al., 2021; Shi et al., 2022). In particular, hospitableness as a warm welcome and the desire to please may be related to one's well-being and, indisputably, a host's hospitable attitude may significantly enhance the guest's well-being through catering for his or her physical, social, and psychological needs (Kim et al., 2018).

The limited extant literature investigating the relationship between hospitality and healthcare highlighted the importance of integrating hospitality into healthcare services (see Severt et al., 2008; Wu et al., 2013; Russell-Bennett et al., 2017; Suess and Mody, 2017; Erickson and Rothberg, 2017; Hunter-Jones et al., 2020; Alshiha, 2021). Erickson and

Rothberg (2017) identified similarities between hospitality and specific healthcare sectors arguing that retail pharmacies have most in common with hospitality firms, both possessing strong data and explicit knowledge capabilities. Severt et al. (2008) identified the importance of the organization-wide philosophy of hospitality in a hospital setting in order to enhance the service excellence. Confirming this, Wu et al. (2013) argued that healthcare executives need to invest in physical hotel design elements and associated operational features in order to enhance the patient experience. Hunter-Jones et al. (2020) introduced a hospitality-oriented patient experience framework designed to enhance the patient experience through facilitating favorable employee–customer interactions. Suess and Mody (2017) examined the infusion of hospitality into healthcare by emphasizing the “patient as customer”. Their study identified the hotel-like attributes that patients prefer in hospital rooms and the effect of their provision on patients' well-being and willingness to pay higher out-of-pocket expenses. In another empirical study, Alshiha (2021) examined the role of quarantine hotels in providing improved quality of life through both medical and hospitality services during the pandemic. The study identified that medical

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service quality, financial savings, and convenience, as well as hospitality provided by quarantine hotels, play positive roles in promoting health behavior and quality of life.

These studies make an important contribution to the existing body of knowledge by providing both conceptual and empirical evidence to support our understanding of the interface between hospitality and healthcare. However, the extant literature on the interface between hospitality and healthcare remains scant. Most of the studies appear to be conceptual, leaving a glaring empirical gap in the literature. In addition, although limited, these studies have identified hospital design elements and employee-patient interactions as important antecedents of patient experience and well-being of patients while neglecting the important concept of ‘hospitalableness’ in explaining the patient experience as well as satisfaction and the well-being of patients. This is surprising given that hospitalableness as an attitude is considered a significant asset that contributes to visitors’ feeling of being welcomed and secure (Brotherton, 1999; Lashley, 2015; Scholl-Grissemann et al., 2021). Hospitalableness is particularly important in the healthcare context as hospitalableness is the distinguishing facet of hospitality in its true sense – that is, taking care of strangers/guests away from home (Tasci and Semrad, 2016). With these thoughts in mind, this study aims to investigate the relationship between hospitalableness, patient experience, emotions, satisfaction, well-being of the patients, and the recommendation intentions of patients.

Previous literature investigating the concept of hospitalableness examined its relationship with customer experience and satisfaction in hotels and restaurants (Tasci and Semrad, 2016; Mody et al., 2019; Scholl-Grissemann et al., 2021). The extant literature also examined the importance of hospitalableness in host and guest relationships for the sustainable development of destinations (Rheede and Dekker, 2016). In addition, hospitalableness has been investigated in the context of hospitality to explain how migrants are welcomed through employment in the hospitality industry (Linge et al., 2020). However, there appears to be no research investigating the concept of ‘hospitalableness’ and its relationships with patient experience and patient well-being. To void this gap, the present study draws on the Stimulus-Organism-Response (S-O-R) framework to theoretically propose and empirically assess the linkage between hospitalableness, patient experience, emotions, satisfaction, subjective well-being of the patients, and their recommendation intentions.

This study makes two distinct contributions to the existing body of knowledge. *First*, the hospitality industry is frequently criticized for its hedonic consumerism through the promotion of unhealthy eating and drinking and for its part in contributing to public disorder, but its role in addressing social and health concerns is yet to be investigated. Through utilizing the stimulus-organism-response (S-O-R) framework and presenting empirical evidence from utilitarian service settings (i.e., patients in hospitals), this study evaluates the importance of hospitalableness for patient experience, satisfaction, and well-being. The study advocates that hospitalableness in utilitarian service settings can serve as a non-medical tool to enhance patients’ experience and engender positive emotions, thus fostering their overall subjective well-being. *Second*, in their conceptual and empirical evaluation of the relationship between hospitality and healthcare, previous literature identifies patient experience, hospital design, loyalty, willingness to pay, and well-being as important antecedents of service excellence in healthcare services. These studies appear to be dispersed in terms of their scope investigating either one or two dimensions of the hospitality and healthcare interface. Our research offers a more holistic and systematic approach to the investigation of the hospitality and healthcare interface by evaluating the relationship between hospitalableness, patient experience, emotions, satisfaction, well-being of the patients, and the recommendation intentions of patients.

## 2. Theoretical background and hypotheses development

### 2.1. Stimulus–organism–response (S-O-R) model

Proposed by Mehrabian and Russell (1974), the Stimulus–Organism–Response (S-O-R) framework based on environmental psychology provides a theoretical foundation for comprehending customer behavior (Bigne et al., 2020). The S-O-R framework suggests that different aspects of the environment act as stimuli, influencing persons’ internal (i.e., psychological) states and causing them to react behaviorally (Jacoby, 2002). The stimulus is defined as those factors that affect the individual’s internal states and include social and emotional inputs (Ulrich et al., 2008). Accordingly, stimuli influence human cognitive and affective reactions, thereby influencing behavior (Mehrabian and Russell, 1974).

Previous research has employed the S-O-R paradigm to investigate the influence of environmental factors on human emotional states and behavior (e.g., Spence et al., 2014; Grewal et al., 2017). This framework has also been employed in hospitality research. Ali and Amin (2014) expanded Mehrabian and Russell’s S-O-R model by integrating hotel-specific stimuli and measurements of emotions and satisfaction to address the effect of the physical environment on customers’ behavioral intentions. Wang and Sun (2014) contended that color and music influence customer purchase intentions in hotel via emotions and perceived quality. Choi and Kandampully (2019) used the S-O-R model to understand the effect of atmosphere on guest satisfaction and guest engagement in upscale hotels. They suggested that the room design element has the highest impact on satisfaction followed by the social component.

In the healthcare literature, Chudhery et al. (2021) used the S-O-R paradigm to investigate the influence of technology-based service features on patients’ behavioral intentions in hospitals. Kim et al. (2021) suggested, using the S-O-R theory, that customer satisfaction plays a critical role in influencing customers’ future behavior in medical-care services when the commercial connection is converted to friendship. Yang et al. (2021) extended the S-O-R theory by investigating how patients perceive online pharmacy services. Overall, the S-O-R model is useful to understand the associations between *stimuli* (e.g., hotel or hospital servicescape and characteristics), *process* (e.g., emotions, experience, and satisfaction), and *response* (e.g., repurchase, and recommendation) in hospitality and healthcare-related contexts (Jani and Han, 2015).

### 2.2. Hospitalableness in healthcare

As an essential component of the hospitality (Tasci and Semrad, 2016; Mody et al., 2019) and healthcare industries (Severt et al., 2008; Kelly et al., 2016), hospitalableness has gained momentum in the literature (e.g., Mody et al., 2019). However, while interrelated, hospitalableness can be often confused with hospitality. Telfer (2000) distinguished between *hospitality* as the provision of food, drink, and lodging to guests and *hospitalableness* as an attitude exhibited by hospitable individuals. This distinction is of paramount significance because while hospitalableness is required for genuine hospitality to be supplied, hospitalableness can exist without the supply of hospitality (Brotherton, 1999). This is similar to O’Connor (2005) distinction between service orientation and hospitalableness; while service orientation requires skilfulness, attentiveness, and experience, all of which can be acquired over time, genuine hospitality requires employees to exhibit and distribute high levels of inherent hospitalableness. In this regard, Tasci and Semrad (2016, p. 33) argued that “hospitalableness is the abstract essential component of hospitality”. In sum, hospitalableness can be described as an attitude that makes guests feel welcome and secure (Brotherton, 1999; Lashley, 2015; Scholl-Grissemann et al., 2021).

Thereby, in the context of commercial healthcare where highly engaging and dynamic occurrences between patients and service

providers are still required, hospitableness can offer a brand differentiator by generating exceptional quality services and positively influencing sustained competitive edge (Hemmington, 2007; Lashley, 2008; Tasci and Semrad, 2016). While extant studies offer useful insights into hospitableness, its role in enabling favorable patient experiences in the healthcare context has not been adequately investigated. According to Webster et al. (2011), improving welcoming health service delivery necessitates paying close attention to patient experiences. Therefore, in the context of healthcare, the literature presents a compelling case for enhancing hospitableness in the healthcare business. Given hospitals' efforts and aspirations to improve the patient experience through hospitable care, our inclusion of hospitableness is timely. Based on the S-O-R paradigm, we propose hospitableness as a stimulus for patients' hospital experiences; thus, the following hypothesis is formulated:

**H1.** Hospitableness has a positive effect on patient experience.

In addition to the potential role of hospitableness on patient experiences, extant literature also discusses how hospitableness can bring out desired favorable emotional reactions (Hemmington, 2007; Lashley, 2008; Lugosi, 2008; Ariffin et al., 2011, 2013; Ariffin and Maghzi, 2012; Ariffin, 2013; Tasci and Semrad, 2016). Lashley et al.'s (2015) study into the feelings of hospitality through special dining events, and Teng and Chang's (2013) evaluation of consumer value in restaurant consumption provide paths for further research. Teng and Chang (2013), for example, investigated the influence of employee friendliness on consumer emotional reactions. Similarly, Ariffin and Omar (2016) noted that hospitability modulates the association between surprise and customer joy, implying its ability to trigger favorable consumer feelings. In utilitarian service settings, research alludes to a possible linkage between hospitableness and positive emotions; for instance, Ladhari et al. (2017) found that perceived service quality and service environment increase positive emotions such as happiness and pleasantness. Based on this realization, we propose the following hypothesis:

**H2.** Hospitableness has a positive effect on patients' positive emotions.

Hospitals are increasingly considering incorporating hospitality components (i.e. hospitableness) in order to raise revenue and achieve positive patient-centered results (Kelly et al., 2016). Despite its obvious attribute (i.e. caring for visitors away from home), hospitableness has been studied mostly in hedonic service settings, with only a few studies addressing hospitableness in utilitarian service settings such as the healthcare sector. Existing research shows that hospitality services provided in healthcare institutions may have an impact on a patient's overall care experiences and feelings of well-being (Kelly et al., 2016, 2020). When patients feel valued in a warm welcoming environment that takes into account their physiological, emotional, and psychological needs, recovery time is reduced and satisfaction from the hospitable care received is likely to be higher (Hepple et al., 1990). Indeed, hospitality services play an important role in meeting the patient's expectations and eventually enhancing their satisfaction (Kelly et al., 2016; Kim et al., 2020). In their study on three hospitality organizations including hospitals, Pijls et al. (2017) found that all experiential factors of hospitality (i.e. inviting, care, comfort) had a statistically significant effect on overall satisfaction. Hence, we posit the following hypothesis:

**H3.** Hospitableness has a positive effect on patients' overall satisfaction.

### 2.3. The effects of positive emotions and overall satisfaction on subjective well-being

Subjective well-being has been subject to a significant amount of recent research within the realm of hospitality (Huang et al., 2019; Feng et al., 2022). Diener and Emmons (1984) defined subjective well-being as a person's assessment of his or her life as satisfying. The subjective

judgment of one's life might be based on cognitive or emotive grounds or on a mix of the two (Diener et al., 1985). Hospitality research provides considerable empirical evidence on how satisfaction with services may lead to greater levels of subjective well-being. For instance, Altınay et al. (2019) noted that customers' satisfaction with coffee shops has a positive influence on their well-being. In the context of healthcare, Dagger and Sweeney (2006) suggested that service satisfaction has a beneficial influence on patients' reported quality of life. Based on the above-mentioned discussion, we assume that the more satisfied patients are the more enhanced their subjective well-being is. This frames the following hypothesis:

**H4.** Patients' overall satisfaction has a positive effect on their subjective well-being.

Positive emotions such as hopefulness, optimism, and contentment could improve individuals' well-being over time by extending their attitudes and strengthening their psychological resources (Fredrickson, 2004). Past studies highlight the role of positive emotions in promoting well-being (Park and Slattery, 2012; Fredrickson, 2002). In utilitarian service settings such as hospitals, cultivating positive emotions is crucial to enhance patients' well-being. The broaden-and-build theory of positive emotions (Fredrickson, 2001) suggests that positive emotions broaden the scopes of attention and cognition and, by consequence, initiate upward spirals toward increasing well-being (Fredrickson and Joiner, 2002). Based on this discussion, we propose the following hypothesis:

**H5.** Patients' positive emotions have a positive effect on their subjective well-being.

### 2.4. Patient experience and its consequences

There is wide agreement on the role of positive experiences in influencing patients' emotional, cognitive, and psychological states (Fitzpatrick and Stalikas, 2008; Helena Vinagre and Neves, 2008). Interactions with service providers have been proven to add to individuals' experiences by producing a sense of comfort or contentment (Wu, 2007; Chen et al., 2020), which helps to meet their emotional needs. In other words, a favorable customer experience may contribute to the enhancement of happy feelings (Arici et al., 2022). Similarly, Ali and Amin (2014) examined and found the significant effect of customers' experience on their emotions in the Chinese hospitality context. Ali et al. (2016) also revealed a significant effect of service experience on customer emotions at resort hotels in three cities in China. Despite the significant role of service experiences in individuals' emotions, there is no adequate research in the healthcare literature. To illustrate, Rätty and Gustafsson (2006) addressed the important role of confirming and disconfirming healthcare experiences on patients' emotions. This academic debate therefore concludes that service experiences, including physical environmental determinants and interactions with providers, may affect the emotional states of the customers (i.e. patients). Hence, we develop the following hypothesis:

**H6.** Patient experience has a positive effect on positive emotions.

Well-being is a measure of life quality that social psychologists use to address the social issues of a well-lived life. Subjective well-being refers to one's own assessment of overall contentment with one's private life and the frequency with which emotions occur (Altınay et al., 2019; Huang et al., 2019). The paradigm has been extensively accepted in a variety of areas, but no agreement has been established on the fundamental components contributing to an individual's well-being (Leonardi et al., 2005). According to the bottom-up method of the well-being theory, well-being is derived from a total of good and pleasant life experiences (Diener, 1984).

Numerous scholars have argued for the crucial significance of customer experience on well-being in tourism and hospitality contexts in

current empirical studies. These include Milman's (1998) study on the impact of tourism on senior travelers' well-being and happiness, McCabe and Johnson's (2013) study on the relationship between social tourism experience and subjective well-being, and Altınay et al. (2019) study on the positive effect of social interactions with others on the social well-being of elderly customers.

These studies' findings support the idea that customer experiences are a significant component of an individual's well-being. The importance of experience in determining well-being has also been advocated in the medical literature. According to Fleischer et al. (2009), the primary goal of communication and engagement in the health environment is to impact the patient's state of well-being. Additional data show that patients seek to have a sense of 'at homeness' (Hepple et al., 1990, p. 390), of being welcomed, and of being linked to nurses, which lead to a sense of being at ease with oneself and people in their environment (Gilje, 2004). The physical environment is seen as an important component of the patient experience, with some hospitals employing hospitality-inspired designs inside a medical setting to appeal to and reassure patients (Kelly et al., 2020) as well as to guarantee that they are "treated with decency and respect" (Kelly et al., 2016). This current study anticipates beneficial correlations between hospital experiences and patients' subjective well-being in the context of healthcare provision in the provided research environment.

**H7.** Patient experience has a positive effect on subjective well-being.

According to the S-O-R theory, as an organism component, customer experiences are considered to have positive impacts on individuals' responses (Mehrabian and Russell, 1974), including repurchase intentions and recommend intentions. Because pleasure is often related with a specific transaction at a certain time (Cronin et al., 2000), it is the instantaneous response to both tangible and intangible brand stimuli (Ali et al., 2016). It is suggested that the core service, staff service, and sentiments evoked during service consumption have a direct impact on satisfaction (Grace and O'Cass, 2004). Environmental psychology literature has also examined the relationship between the service environment and customer happiness. Hospitality scholars have examined the outcomes (e.g., satisfaction and behavioral intentions) of customer experiences in several contexts. For example, Frías-Jamilena et al. (2019) found that tourists' experience plays a moderating role on the relationship between perceived value and overall satisfaction. Hao and Chon (2021) revealed that pleasant experience of contactless service in hospitality encounters generates a positive effect on customer satisfaction. More specifically, in the healthcare literature, Jones et al. (2017) empirically tested the relationship between patient experience and overall satisfaction in hospitals. We therefore hypothesize:

**H8.** Patient experience has a positive effect on overall satisfaction.

### 2.5. Antecedents of recommendation intention

As a highly sought after behavior to sustain hospitality business, intention to recommend refers to positive customer behavior such as positive word-of-mouth (WOM) and favorable referral (Hosany et al., 2022; Lacap and Alfonso, 2022). Wan-Ping and Hsieh-Hong (2011) found that the propensity to promote and laud items or services to the general public is a secondary behavior stemming from and a measurable category of customer loyalty. This is supported by research by Gerdt et al. (2019) and Kim and Hwang (2021) who claimed that one of the behaviors of a devoted consumer is to promote products and services to others. Satisfaction is one of the main precursors of loyalty in both the hospitality (Kim et al., 2015; Gallarza et al., 2019; Prayag et al., 2019) and healthcare literatures (Lei and Jolibert, 2012; Zhou et al., 2017; Fatima et al., 2018). Satisfied customers are more likely to recommend the service to others, while dissatisfied customers are unlikely to repurchase the service or product (Alegre and Garau, 2010) and will probably engage in negative WOM (Fernandes and Fernandes, 2018). In

the healthcare literature, previous studies confirm the relationship between patient satisfaction with hospital services and their intention to recommend (Bendall-Lyon and Powers, 2004; Choi et al., 2004; Otani et al., 2004; Elleuch, 2008; Ramez, 2012; Naik Jandavath and Byram, 2016). Patients who are satisfied with their providers tend to have greater confidence in them, to be more confident in their interactions, and to be more inclined to refer them to others (Lacap and Alfonso, 2022). Thus, it is logical to hypothesize that:

**H9.** Overall satisfaction has a positive effect on recommendation intention.

Like satisfaction, previous research has also shown that positive emotional reactions can have a positive impact on behavioral intentions (Pramod and Nayak, 2018). Customers that feel more favorable emotions during or after a service interaction/consumption are more likely to promote positive WOM (Sukhu et al., 2019). For instance, Yan et al. (2018) noted that customers who had favorable emotions during a purchase are more likely to engage in positive WOM. In utilitarian service settings, research shows that positive emotions can lead to positive behavioral intentions including recommending the healthcare facility to friends and relatives (Ladhari et al., 2017). Thus, we posit the following hypothesis.

**H10.** Positive emotions have a positive effect on recommendation intention.

### 2.6. Mediating effect of patient experience

According to Pizam (2007), the act of being hospitable promotes a guest's overall pleasure while promoting the whole quality customer service through greater attentive social interactions with the guest. In utilitarian service settings such as hospitals, it was theoretically established that hospitableness might result in greater overall satisfaction and elicit positive emotions. However, one may assume that the patient experience is a crucial underlying factor for hospitableness to induce satisfaction and elicit positive emotions. Extant hospitality research employs experience as a potential mediating variable (e.g., Jeloudarlou et al., 2022). While we are unaware of research in the context of healthcare employing patient experience as an intervening variable, we argue that the effect of hospitableness on overall satisfaction and positive emotions is enacted based on patients' experience. This realization frames the following hypotheses:

**H11.** Patient experience mediates the relationship between hospitableness and overall satisfaction.

**H12.** Patient experience mediates the relationship between hospitableness and positive emotions.

## 3. Method

### 3.1. Survey instrument

The constructs employed in the present study were adapted from past literature. Hospitableness was measured using seven items adapted from Mody et al. (2019) on a seven-point Likert-type scale [1 =Strongly Disagree, 7 =Strongly Agree]. These items were slightly modified to fit the context of the current study. For instance, the word "staff" was replaced by "doctors" and "nurses". Positive emotions were measured using 12 items adapted from Hosany and Prayag, (2013) and Laros and Steenkamp (2005). These emotions were measured on a seven-point Likert-type scale [1 =Not at all, 7 =Very Much]. Patient experience was measured using 12 items adapted from Webster et al. (2011). The patient experience measure involves four dimensions; these are communication with nurses, communication with doctors, physical environment, and pain management. The current study focuses on the higher-order construct (i.e. patient experience). These items were

measured on a seven-point Likert-type scale (1 =Never, 7 =Always). Overall satisfaction was operationalized as a summative overall measure adapted from Duman and Mattila (2005) and Hosany and Prayag (2013). Respondents were asked to indicate their overall satisfaction with their visit to this hospital [1 = very dissatisfied and 7 = very satisfied; 1 = terrible and 7 = delighted; and 1 = did not meet my expectations and 7 = exceeded my expectations]. Five items adapted from Diener et al. (1985) were used to measure subjective well-being on a seven-point Likert-type scale [1 =Strongly Disagree, 7 =Strongly Agree]. Finally, recommendation intention was operationalized using three items adapted from Al-Awamreh and Suliman (2019) and Rychalski and Hudson (2017). The questionnaire was only available in English and pre-tested on a sample of 35 in-patient in Northern Cyprus. The pilot study resulted in some minor modifications to the questionnaire. For instance, the pilot study demonstrated that doctors and nurses could be viewed differently by inpatients and, therefore, items such as “the doctors and nurses displayed a genuine desire to please” were split into two items by separating “doctors” and “nurses”.

### 3.2. Sampling and data collection

Data for the present study were collected from patients staying for at least one night in hospitals in Northern Cyprus. Drawing on a convenience sampling approach, potential participants were approached by one of the authors and asked to participate in the study. Those who demonstrated interest were briefed about the research project and a consent form was obtained from them. The data collection took place over three and a half week from 3 October until 28 October 2022. The inclusion criteria involved recruiting respondents who were at least 18 years old and who had spent at least one night in the hospital. By the cut-off date for data collection, a total of 204 valid questionnaires were collected and retained for further analysis. Ethical approval for this study was obtained from the Near East University Review Board. Following Hair et al.’s (2017) recommendation, the adequacy of the sample size was assessed for a statistical power of 80% and a significance level of 0.5. Given that the current model consists of four independent variables, a sample size of 113 observations is considered sufficient. In brief, the sample size in the present study (N = 204) meets and exceeds

the required minimum sample size.

### 3.3. Data analysis

The present study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the hypothesized model (Fig. 1). PLS-SEM involves two processes; the outer model assessment and the inner model assessment (Hair et al., 2017). The outer model assesses the relationship between a latent variable and observed variables whereas the inner model evaluates the relationship between latent variables. SmartPLS 4 was used to estimate the model with a bootstrapping procedure (n = 5000 resamples). Given that the proposed model involves a higher-order construct (i.e. patient experience), the disjoint two-stage approach was used for modeling (Sarstedt et al., 2019). In the first stage, the lower-order components of patient experience were linked to its higher-order construct, with all its lower-order components achieving adequate reliability (Table 2) and discriminant validity (Table 3). In the second stage, the latent scores of the first-order components were saved and used as indicators of the higher-order construct.

## 4. Findings

### 4.1. Demographic profile of the sample

The sample was almost equally split between males (51 %) and females (49 %). A good representation of different age groups was achieved with around one-third aged 55 or over. More than one-half of the respondents were married (51.5 %). They were either accompanied by their spouses (35.3 %) or stayed in the hospital alone (31.9 %). More than one-quarter of the sample had a postgraduate qualification and around one-third had a college or an undergraduate degree. The majority of respondents were on their third visit to the hospital (71.5 %). (see Table 1).

### 4.2. Outer model assessment

Before assessing the inner model, reliability, convergent, and discriminant validity of the main first-order constructs were evaluated

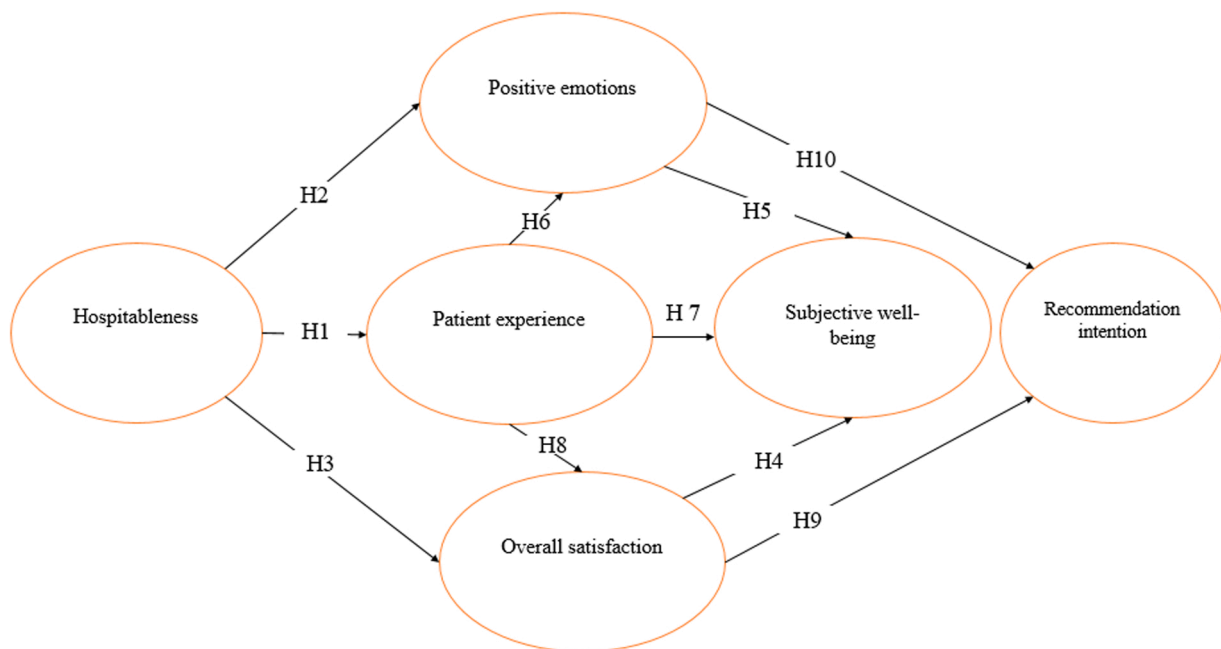


Fig. 1. : Research model and proposed hypotheses.  
 H11: Hospitableness→Patient experience → Overall satisfaction.  
 H12: Hospitableness→Patient experience → Positive emotions.

**Table 1**  
Profile of participants.

Gender	N	%	Marital status	N	%
Male	104	51.0	Single	81	39.7
Female	100	49.0	Married	105	51.5
Total	204	100.0	Other	18	8.8
			Total	204	100.0
<i>Age</i>					
18–24 years old	15	7.4	<i>Previous visit</i>	N	%
25–34 years old	44	21.6	None	25	12.3
35–44 years old	39	19.1	Once	33	16.2
45–54 years old	29	14.2	Twice	26	12.7
55 and above	40	19.6	Three times	25	12.3
Total	204	100.0	Four times or more	95	46.5
			Total	204	100.0
<i>Education</i>					
High school graduate or less	44	21.6			
College diploma/undergraduate	69	33.8			
Master's degree	34	16.7			
Ph.D.	20	9.8			
Professional qualification	24	11.8			
Total	204	100.0			

(Hair et al., 2017). After dropping the following items (EMO1 and EX-CN1), all item loadings were above the recommended threshold of 0.7 (Hair et al., 2017). Cronbach's  $\alpha$ , composite reliability (CR), and Rho\_A's of all the constructs were above the recommended threshold of 0.7 (see Table 2) indicating that all items and constructs were internally consistent. Average Variance Extracted (AVE) of all constructs met the threshold of 0.5 and above, indicating that convergent validity of the latent constructs is established (Fornell & Larcker, 1981).

4.3. Reflective-reflective construct

In the present study, patient experience was specified as a higher-order reflective-reflective construct (Sarstedt et al., 2019) involving four lower-order components (i.e. communication with nurses, communication with doctors, physical environment, and pain management). The higher-order construct met both reliability and convergent validity requirements with CR greater than 0.7 (CR = 0.945) and AVE greater than 0.5 (AVE = 0.812). The higher-order construct also met the criteria for both Fornell and Larcker and HTMT ratios indicating that discriminant validity is established.

4.4. Inner model assessment and hypothesis testing

The inner model was assessed using standardized path coefficients ( $\beta$ ) and their associated significance levels. The Standardized Root Mean Square (SRMR) value for model fit is 0.048, thus below the recommended threshold of 0.08 (Hu & Bentler, 1995). Table 4 presents the bootstrapped standardized path coefficients and associated significance levels. Hospitableness had a positive influence on patient experience ( $\beta = 0.849, p < 0.001$ ), thus supporting H<sub>1</sub>. Hospitableness also had a positive influence on positive emotions ( $\beta = 0.367, p < 0.001$ ), thus supporting H<sub>2</sub>. This means that perceived hospitableness can significantly enhance patient experience while also stimulating positive emotions. However, contrary to our prediction, there is little support to H<sub>3</sub> that proposed a positive relationship between hospitableness and overall satisfaction. As predicted, the more patients felt positive emotions, the more enhanced their subjective well-being is ( $\beta = 0.234, p < 0.01$ ), thus supporting H<sub>5</sub>. The analysis also supports H<sub>7</sub> indicating that favorable patient experience has a positive effect on their subjective well-being ( $\beta = 0.278, p < 0.01$ ). Interestingly, however, patients' overall satisfaction from the hospital does not have an impact on their subjective well-being, thus H<sub>4</sub> was not supported. As predicted, both overall satisfaction ( $\beta = 0.598, p < 0.001$ ) and positive emotions

**Table 2**  
Outer model assessment.

Construct	$\lambda$	$\alpha$	rho_a	rho_c	AVE
Positive emotions		0.973	0.974	0.976	0.788
Emo1: Hopeful	0.867				
Emo2: Optimistic	0.868				
Emo3: Encouraged	0.846				
Emo5: Joy	0.900				
Emo6: Happy	0.905				
Emo7: Love	0.828				
Emo8: Warm-hearted	0.910				
Emo9: Caring	0.918				
Emo10: Serene	0.917				
Emo11: Content	0.906				
Emo12: Peaceful	0.895				
Patient experience (Communications with nurses)		0.936	0.937	0.969	0.940
Ex-CN2: Nurses listen carefully	0.971				
Ex- CN3: Nurses explain things in an understandable way	0.968				
Patient experience (Communications with doctors)		0.956	0.956	0.971	0.918
Ex-CD4: Doctors treat with courtesy and respect	0.961				
Ex-CD5: Doctors listen carefully	0.967				
Ex-CD6: Doctors explain things in an understandable way	0.947				
Patient experience (Physical environment)		0.912	0.913	0.958	0.919
Ex-PE7: Hospital room was kept clean	0.960				
Ex-PE8: Surrounding area was kept quiet	0.958				
Patient experience (Pain management)		0.914	0.928	0.939	0.795
Ex-PM9: Pain was well controlled	0.904				
Ex-PM10: Staff did everything they could to help with pain	0.919				
Ex-PM11: Staff explained what medication was for	0.898				
Ex-PM12: Staff explained possible medication side effects	0.843				
Hospitableness		0.972	0.973	0.977	0.857
Hosp1: I felt welcome at the hospital	0.871				
Hosp2: The doctors were kind	0.937				
Hosp3: The nurses were kind	0.936				
Hosp4: The doctors displayed a genuine desire to please	0.957				
Hosp5: The nurses displayed a genuine desire to please	0.918				
Hosp6: The doctors treated me with respect	0.928				
Hosp7: The nurses treated me with respect	0.928				
Subjective well-being		0.919	0.930	0.940	0.758
SW1: In most ways my life is close to my ideal	0.874				
SW2: The conditions of my life are excellent	0.910				
SW3: I am satisfied with my life	0.922				
SW4: So far I have gotten the important things I want in life	0.880				
SW5: If I could live my life over I would change almost nothing	0.758				
Recommendation intention		0.980	0.980	0.987	0.961
Rec1: I would recommend this hospital to my relatives and friends	0.982				
Rec2: I would say positive things about this hospital	0.981				
Rec3: I would encourage friends and relatives to choose this hospital	0.979				
Overall satisfaction		0.967	0.967	0.978	0.938
Sat1: Very Dissatisfied/Very Satisfied	0.968				
Sat2: Terrible/Delighted	0.967				
Sat3: Did not meet my expectations/Exceeded my expectations	0.970				

To establish discriminant validity, the square roots of AVE for latent constructs with the correlations among them were assessed (Fornell & Larcker, 1981). In addition, as a more reliable approach to testing for discriminant validity (Henseler et al., 2015), the heterotrait-monotrait (HTMT) ratio was evaluated. All the HTMT ratios were below the threshold of 0.90, indicating good discriminant validity (Henseler et al., 2015).

( $\beta = 0.230, p < 0.001$ ) have a positive influence on recommendation intention, thus supporting  $H_9$  and  $H_{10}$ , respectively.

The proposed model depicts patient experience as a potential mediator of the relationship between hospitableness and overall satisfaction as well as the relationship between hospitableness and positive emotions. Following Zhao et al. (2010), the mediating effects were assessed using the bootstrapping technique to test the significance of the indirect effects and determine that the confidence interval does not include the value of zero. The results indicated that patient experience fully mediated the relationship between hospitableness and overall satisfaction ( $p < 0.001$ , BCa CI:[0.501–0.770]) and partially mediated the relationship between hospitableness and positive emotions ( $p < 0.001$ , BCa CI:[0.253–0.516]). These results support  $H_{11}$  and  $H_{12}$ .

### 5. Discussion, conclusions and practical implications

#### 5.1. Discussion of the findings

The findings of the study demonstrate that hospitableness can positively influence patient experience and positive emotions, but not overall satisfaction. Interestingly, while hospitableness does not seem to directly influence overall satisfaction, this effect is indirectly achieved via patient experience. The findings also reveal that patients' subjective well-being may be enhanced by positive emotions but not by overall satisfaction. Both positive emotions and overall satisfaction have a positive effect on recommendation intention.

The positive impact of hospitableness on patient experience that we find adds to the literature by expanding prior studies on the relationship between hospitality services and customer experience (e.g., Webster,

2011; Lashley, 2015; Tasci and Semrad, 2016). Furthermore, the high association between hospitableness and positive emotions in this study suggests that hospitable service practices are directly tied to the emotional immersion experience and significantly expands prior research findings (e.g., Ariffin et al., 2013; Teng and Chang, 2013; Lashley, 2015). The finding that patient experience has a substantial influence on positive emotions elucidates the theoretical relationship between experience and emotions, expanding recent research on consumer emotions (Ariffin and Omar, 2016) and experiences (Hunter-Jones et al., 2020). Moreover, this study discovered a significant relationship between patient experience and subjective well-being, which gives the possibility for theory development and extends previous research findings (e.g., Song et al., 2018; Altinay et al., 2019; ). Patient experience has a substantial impact on overall patient

**Table 4**  
Hypothesis testing.

Hypothesis	Beta	T-value	P Values	Decision
Positive emotions → Subjective well-being	0.234	2.400	0.016	Supported
Positive emotions → Recommendation intention	0.230	3.018	0.003	Supported
Hospitableness → Positive emotions	0.367	4.809	0.000	Supported
Hospitableness → Overall satisfaction	0.109	1.315	0.189	Not supported
Hospitableness → Patient experience	0.849	34.576	0.000	Supported
Overall satisfaction → Subjective well-being	0.187	1.521	0.128	Not supported
Overall satisfaction → Recommendation intention	0.598	7.289	0.000	Supported
Patient experience → Positive emotions	0.451	6.011	0.000	Supported
Patient experience → Subjective well-being	0.278	2.415	0.016	Supported
Patient experience → Overall satisfaction	0.743	10.239	0.000	Supported

**Table 3**  
Discriminant analysis.

Fornell-Larcker criterion	1	2	3	4	5	6	7	8	9
Experience (with nurses)	<b>0.970</b>								
Positive emotions	0.710	<b>0.888</b>							
Hospitableness	0.730	0.750	<b>0.925</b>						
Subjective well-being	0.486	0.581	0.554	<b>0.871</b>					
Experience (Pain Mang.)	0.738	0.743	0.776	0.573	<b>0.892</b>				
Recommendation intention	0.696	0.712	0.778	0.578	0.814	<b>0.980</b>			
Overall satisfaction	0.676	0.717	0.740	0.586	0.818	0.818	<b>0.968</b>		
Experience (with doctors)	0.728	0.682	0.824	0.552	0.824	0.787	0.771	<b>0.958</b>	
Experience (environment)	0.616	0.615	0.730	0.593	0.772	0.729	0.743	0.820	<b>0.959</b>
HTMT <sub>90</sub> Criterion									
Experience (with nurses)									
Positive emotions	0.742								
Hospitableness	0.764	0.768							
Subjective well-being	0.519	0.606	0.583						
Experience (Pain Mang.)	0.793	0.782	0.811	0.617					
Recommendation intention	0.726	0.728	0.798	0.604	0.852				
Overall satisfaction	0.711	0.736	0.762	0.62	0.864	0.84			
Experience (with doctors)	0.77	0.703	0.854	0.583	0.866	0.813	0.802		
Experience (environment)	0.666	0.649	0.775	0.642	0.831	0.771	0.791	0.877	

satisfaction and gives a fresh starting point for experience research in healthcare that will significantly widen or extend earlier studies (e.g., Ali et al., 2016; Jones et al., 2017; Hao and Chon, 2021).

This study found that patients' overall satisfaction increased their intention to recommend, which has ramifications for academics as well as widening previous research (e.g., Fernandes and Fernandes, 2018; Lacap and Alfonso, 2022). Furthermore, it was shown that patients' positive emotions had an influence on recommendation intention.

More crucially, the findings reveal that the mediation mechanism by which patient experience plays a partial mediator role between hospitableness and positive emotions, as well as a complete mediator role between hospitableness and overall satisfaction. Thus, by shining a light on how hospitableness promotes positive emotions and overall satisfaction via the intervening role of the patient experience, this study presents a timely and progressive contribution to the hospitality and healthcare literature.

Furthermore, contrary to prior theory and literature (e.g., Kelly et al., 2016, 2020; Kim et al., 2020), the findings fail to provide empirical support for the relationship between hospitableness and patients' overall satisfaction, implying that further empirical testing of the relationship is warranted. Notably, our study found no empirical evidence of a link between overall satisfaction and subjective well-being, warranting further academic investigation. Thus, based on a theoretical framework of stimulus, process, and behavior toward healthcare environments, this research offers a better understanding of hospitableness, patient experience, subjective well-being, and recommendation intention.

## 5.2. Theoretical implications

Despite the increasing significance of hospitability in healthcare settings, research on the concept's implications for potential patients' stimulus and reaction is limited. This study offers academics helpful insights for developing theories and verifying the S-O-R paradigm. The findings of this study, in particular, provide a number of theoretical contributions to academics and scholars. The current study verified the S-O-R theory's efficacy by including hospitability in hospital contexts as a stimulus and patients' subjective well-being and recommendation intention as a reaction inside the healthcare services environment. Furthermore, this study conceptually confirmed the S-O-R theory's ability to incorporate patient experiences as a process and an intervening measure relating hospitability and relevant patient-level outcomes (i.e. overall satisfaction and positive emotion).

A key highlight in the present study is that, in a healthcare context, patients' positive emotions have a higher influence on their subjective well-being than overall satisfaction with the service. Thus, positive emotions such as hopefulness, optimism, and contentment are more likely to lead to patients being well when the patient believes the care provided in a hospital is welcoming. Surprisingly, overall satisfaction with healthcare services has a bigger influence on intent to refer than subjective well-being. This finding shows that when patients are happy with health treatments, they are more likely to promote them even if they do not achieve well-being in the hospital setting.

Overall, through utilizing the stimulus-organism-response (S-O-R) framework, this study teased out and evaluated the 'soft elements' of the hospitality and healthcare interface (hospitableness, experience, emotions) leading to socio-psychological and behavioral outcomes (well-being and intention to recommend). This study demonstrated that healthcare as a social and health issue can not only be tackled by medical interventions alone but also with the help of hospitality activities oriented towards enriched patient experience, positive emotions and satisfaction leading to overall better patient well-being.

## 5.3. Practical implications

The paper also provides several practical implications. The findings of the study demonstrated that hospitality service design and provision

is an integral part of the healthcare sector. Therefore, the healthcare sector needs to develop and embed a 'hospitality-oriented' mindset and culture in healthcare organizations in order to deliver better patient experience, positive emotions, satisfaction, and patient well-being. Such a transformation would require revisiting the selection, recruitment, training and performance evaluation practices integrating hospitality principles into medical support and service development and provision. Hospitableness, in particular, can be better developed and utilized through the training of doctors, nurses and support staff as a team emphasizing a collective approach to demonstrating hospitableness to 'patients as guests'. In addition, given that the intention to recommend is closely associated with the experience, satisfaction, and well-being of the patients, healthcare organizations need to invest more time and effort in gathering feedback from patients to measure their perceptions of hospitableness, experience and satisfaction, and to act upon these and make improvements accordingly. The hospitality industry has a great deal to offer beyond the 'commercial settings' such as hotels and restaurants. We suggest that the industry reflects on and revisits its positioning in the socio-economic environment and develops more strategic partnerships with hospitals, healthcare institutions, care homes, and even refugee camps and hotels in order to help to improve the well-being of vulnerable populations such as patients, children, the elderly, and refugees.

## 5.4. Limitations and future research

Finally, this study is not without limitations. The cross-sectional nature of the study and the relatively small sample size drawn from one cultural setting (i.e. Northern Cyprus) should not be neglected when considering the generalizability of the findings. In addition, this study has focused on the "soft aspects" of hospitality without considering the influence of servicescapes on patients' experience and well-being. Further research could investigate the influence of both hospitableness and physical surroundings on the patients' experience, emotions, satisfaction, and well-being.

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