

Satisfaction with High-Altitude Health Education Dramas: A Structural Equation Modelling Analysis of an Extended ACSI Model

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Abstract

Background

As high-altitude activities become more common, effective health education is imperative. Drama-based interventions are promising, yet the evaluation remains largely qualitative, leaving a gap in understanding the psychological drivers of their impact, such as emotional resonance (ER). This study quantitatively assessed satisfaction with a high-altitude health education drama by extending the American Customer Satisfaction Index (ACSI) model to incorporate ER.

Methods

A cross-sectional survey was conducted among 1,007 infrastructure construction workers in Chongqing, China. The participants watched a 20-minute high-altitude health education drama and completed a structured questionnaire measuring audience expectations (AE), ER, perceived quality (PQ), perceived value (PV), audience satisfaction (AS), and behavioral intention (BI). The data were analysed by structural equation modelling, with model fit evaluated through indices (CFI = 0.964, NFI = 0.957, IFI = 0.964, RMSEA = 0.073). Hypotheses were tested via path analysis and bootstrap mediation (5,000 samples).

Results

The mean scores of AE, ER, PQ, PV, AS, and BI were 13.45 (total 15), 13.92 (total 15), 52.28 (total 55), 14.20 (total 15), 14.20 (total 15), and 28.46 (total 30), respectively, indicating high satisfaction. The SEM showed an acceptable fit, with all hypothesized paths significant ($P < 0.05$). Key direct effects included AS on BI ($\beta = 0.825$, $P < 0.001$), PV on AS ($\beta = 0.889$, $P < 0.001$), and ER on PQ ($\beta = 0.683$, $P < 0.001$). Emotional resonance demonstrated partial mediation effects on BI (indirect $\beta = 0.625$, direct $\beta = 0.145$).

Conclusion

This study validated the extended ACSI model for evaluating high-altitude health education dramas. Emotional resonance is a critical driver, underscoring the need to create emotionally engaging content to enhance satisfaction and foster behavior change.

Introduction

Background

Currently, activities such as sports, training, tourism, work, and military operations in high-altitude regions are becoming increasingly common[1, 2], making health education for high-altitude

environments more important than ever[3]. Special environmental factors such as low atmospheric pressure, hypoxia, strong ultraviolet radiation, and significant temperature variations between day and night can trigger a range of life-threatening conditions[1, 4], from acute mountain sickness to high-altitude heart disease and high-altitude cerebral edema[5–8]. Therefore, improving the health literacy and self-protection capabilities of relevant populations will help them better adapt to high altitude conditions.

Traditional health education methods, such as health lectures and leaflets, often fall short in terms of information appeal, audience engagement, and ultimately, behavioral change outcomes. Drama has proven to be an effective means of health communication[9], with its value demonstrated across various health domains worldwide. For instance, a critical literature review revealed that drama as a nursing educational intervention promoted interpersonal skills[10], and creative drama can be used as an effective method to develop positive perceptions of nursing[11]. The village drama against malaria project has provided health education in a fun and engaging way to support village malaria workers in Cambodia[12]. In the border area between Thailand and Myanmar, a film on tuberculosis prevention and control has significantly enhanced local residents' awareness of the disease[13]. These studies indicate that drama's potential to promote health behavior change is universally applicable across cultures and contexts, providing theoretical support for its use in high-altitude health education in this research.

However, evaluations of health education dramas, particularly in high-altitude contexts, remain largely descriptive and qualitative. This approach leaves a significant gap in understanding the psychological mechanisms—emotional resonance (ER) [14, 15]—that influence audience cognition, satisfaction, and ultimately behavioral intentions. To quantitatively investigate these mechanisms, the American Customer Satisfaction Index (ACSI) model offers a robust framework[16]. This is a comprehensive model that assesses customer satisfaction based on actual consumption experiences of products and services and is widely used in business evaluations[17–19]. While the ACSI model has been adapted to assess community health education satisfaction[20], its application to evaluate the specific impact of high-altitude situational dramas remains unexplored.

To bridge this gap, this study developed and disseminated a situational drama on high-altitude health based on real-world scenarios, targeting infrastructure construction workers in high-altitude regions. We then extended the ACSI model, incorporating the novel construct of emotional resonance, to quantitatively evaluate the drama's impact. Using structural equation modelling (SEM), we empirically test the pathways linking emotional resonance, audience expectations (AE), perceived quality (PQ), perceived value (PV), audience satisfaction (AS), and behavioral intention (BI). Our findings aim to provide a validated theoretical framework and empirical evidence to guide the creation and assessment of effective health education dramas for high-altitude populations.

The following hypotheses are proposed:

H1: There is a positive correlation between audience expectations and perceived quality.

H2: There is a positive correlation between perceived quality and perceived value.

H3: There is a positive correlation between perceived value and audience satisfaction.

H4: There is a positive correlation between audience satisfaction and behavioral intention.

H5: There is a positive correlation between emotional resonance and perceived quality.

H6: There is a positive correlation between emotional resonance and perceived value.

H7: There is a positive correlation between emotional resonance and audience satisfaction.

H8: There is a positive correlation between emotional resonance and behavioral intention.

Methods

Study design

This study employed a cross-sectional survey to evaluate satisfaction with a high-altitude health education situational drama among infrastructure construction workers in Chongqing, China. The survey was conducted between November and December 2025. A cluster sampling method was employed to recruit participants from three construction enterprises in Chongqing. The inclusion criteria for participants were as follows: (1) infrastructure construction workers from Chongqing aged 18–30 years; (2) had watched the designated high-altitude health education situational drama; (3) possessed sufficient cognitive ability to complete the survey; and (4) provided informed consent to participate in the study. Individuals who had not watched the drama were excluded from the study.

Data collection

Data collection proceeded in two stages. First, participants collectively watched the health education situational drama. Then, they were asked to complete a structured satisfaction questionnaire using paper questionnaires in one company and the online Questionnaire Star platform in the other. Three trained investigators were present during administration to assist participants and monitor the data collection process. A total of 550 paper questionnaires were distributed, of which 534 were returned and deemed valid. Concurrently, the online survey link yielded 473 valid responses. Combining both channels, a final dataset of 1007 valid questionnaires was obtained for analysis. All participation was voluntary, and informed consent was obtained from each participant before survey completion.

Health education drama

This 20-minute health education drama was professionally produced by the Health Education Center in Chongqing, China. The production leveraged a multidisciplinary team, including specialists from preventive medicine, health education, high-altitude medicine, journalism, and general practice. The drama employs a narrative approach, featuring doctors and grassroots workers as actors in scenarios

depicting real-life situations to maximize audience relatability and engagement. Its content is systematically structured into four key modules: (1) an introduction to the environmental characteristics and health impacts of high-altitude regions; (2) guidance on personal material preparations and psychological adjustments; (3) skills for physical control, identification of altitude sickness, and emergency handling during ascent; and (4) methods for cold protection, warmth preservation, and scientific oxygen use upon initial arrival at high altitudes.

Questionnaire

The research team independently developed a structured questionnaire informed by a comprehensive literature review [17, 20] and insights from in-depth expert discussions to assess the impact of the high-altitude health education drama (Additional file 1). The questionnaire was developed to evaluate the extended ACSI model, which includes the core constructs: AE, ER, PC, PQ, PV, AS, and BI. The draft was refined through research team discussions. The final instrument comprised four parts: (1) demographic information; (2) pre-viewing expectations measured by 3 items on a 5-point Likert scale (from "very low" to "very high"); (3) post-viewing evaluation measured by multiple dimensions (AE, ER, PC, PQ, PV, AS, and BI) with 26 items on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree); and (4) an open-ended question for additional feedback. All constructs demonstrated excellent reliability, with coefficients significantly exceeding the recommended threshold of 0.70. The analysis yielded the following results: AE (3 items; $\alpha = 0.938$), ER (3 items; $\alpha = 0.920$), PQ (11 items; $\alpha = 0.968$), PV (3 items; $\alpha = 0.904$), AS (3 items; $\alpha = 0.961$), BI (6 items; $\alpha = 0.970$), and the overall scale (29 items; $\alpha = 0.982$). The questionnaire was validated through a pilot test ($N = 15$) and exploratory factor analysis, showing high construct validity ($KMO = 0.972$). The full questionnaire is provided in the additional information.

Statistical analysis

The paper questionnaire information was input to establish a database by Epidata 3.1, and the data were analysed via SPSS 22.0 and AMOS 22.0. We obtained frequency (N) and percentage (%) statistics to show the basic characteristics of the participants. To assess the level of satisfaction with health education drama, mean (M) and standard deviation (SD) values were calculated. A one-way variance analysis was performed to evaluate variations in satisfaction scores across different dimensions among participants with diverse characteristics. Pearson correlation coefficients were calculated to determine the associations among audience expectations, emotional resonance, perceived quality, perceived value, audience satisfaction, and behavioral intention. Maximum likelihood estimation was performed to estimate these parameters in SEM. The following indices were used to evaluate the goodness of fit of the model: the comparative fit index (CFI) > 0.9 , normed fit index (NFI) > 0.9 , incremental fit index (IFI) > 0.9 , and root mean square error of approximation ($RMSEA$) < 0.08 . To test the mediating hypotheses, we employed a bias-corrected bootstrap method with 5000 samples to generate a 95% confidence interval (CI) for the indirect effects. $P < 0.05$ was considered statistically significant.

Results

Participant characteristics

Among the 1007 participants, 87.7% were male, and 67.4% were of rural household registrations. The majority of participants (64.6%) were aged 20–25 years, with a further 33.1% under 20 years old. Regarding educational level, 42.1% held a bachelor's degree, followed by 32.5% with a junior college diploma. Most participants (74.1%) reported no prior history of travel to or residence in high-altitude areas (Table 1).

Table 1
Basic characteristics of participants in this study (N = 1007).

Characteristics	Number (N)	Percentage (%)
Gender		
Male	883	87.7
Female	124	12.3
Age in year(year)		
<20	333	33.1
20–25	651	64.6
>25	23	2.3
Household registration		
Urban	328	32.6
Rural	679	67.4
Education level		
High school and below	242	24.0
Junior college	327	32.5
Undergraduate	424	42.1
Postgraduate and above	14	1.4
History of high altitude travel or residence		
Yes	261	25.9
No	746	74.1

The scores of six dimensions of satisfaction with health education drama by characteristics

The mean scores of audience expectations, emotional resonance, perceived quality, perceived value, audience satisfaction, and behavioral intentions for the participants were 13.45 (total 15), 13.92 (total 15), 52.28 (total 55), 14.20 (total 15), 14.20 (total 15), and 28.46 (total 30), respectively. The overall scores across all dimensions indicated a high level of participant satisfaction and positive evaluation. Analysis of variance revealed significant differences in scores based on participant characteristics. A significant difference in audience expectation scores was observed by gender ($P = 0.044$), with male participants reporting slightly higher expectations than females. Furthermore, a significant difference in behavioral intention scores was found based on a history of high-altitude travel or residence ($P = 0.038$). Participants with no prior high-altitude experience reported higher behavioral intentions. No other statistically significant differences were found across the remaining dimensions (ER, PQ, PV, AS) by age, household registration, or education level (Table 2).

Table 2
Health education drama satisfaction scores across six dimensions by participant characteristics (M, SD).

Characteristics	AE	ER	PQ	PV	AS	BI
Gender						
Male	13.49 (1.96)	13.94 (1.65)	52.30 (4.63)	14.22 (1.35)	14.20 (1.40)	28.45 (2.70)
Female	13.11 (2.05)	13.86 (1.78)	52.23 (4.65)	14.11 (1.34)	14.19 (1.45)	28.47 (2.75)
F value	4.059	0.241	0.020	0.627	0.014	0.003
P value	0.044	0.624	0.887	0.429	0.905	0.958
Age in year						
<20	13.29 (2.20)	13.95 (1.68)	52.31 (4.57)	14.22 (1.33)	14.26 (1.38)	28.53 (2.65)
20–25	13.52 (1.83)	13.90 (1.67)	52.22 (4.70)	14.17 (1.36)	14.15 (1.42)	28.38 (2.76)
>25	13.70 (2.20)	14.70 (0.88)	53.91 (3.16)	14.74 (0.86)	14.74 (0.86)	29.48 (1.73)
F value	1.696	2.611	1.487	2.016	2.400	1.982
P value	0.184	0.074	0.227	0.134	0.091	0.138
Household registration						
Urban	13.49 (2.01)	14.03 (1.62)	52.50 (4.38)	14.23 (1.30)	14.27 (1.31)	28.59 (2.49)
Rural	13.43 (1.96)	13.88 (1.68)	52.19 (4.74)	14.19 (1.37)	14.17 (1.44)	28.39 (2.80)
F value	0.241	1.836	0.982	0.277	1.067	1.221
P value	0.623	0.176	0.322	0.599	0.302	0.269
Education level						
High school and below	13.38 (2.11)	13.82 (1.73)	51.83 (4.87)	14.10 (1.41)	14.14 (1.43)	28.29 (2.82)
Junior college	13.59 (1.84)	13.84 (1.72)	52.20 (4.78)	14.17 (1.38)	14.13 (1.44)	28.35 (2.80)
Note: AE, Audience Expectations; ER,Emotional Resonance; PQ,Perceived Quality; PV,Perceived Value; AS,Audience Satisfaction; BI,Behavioral Intention; M, mean; SD, standard deviation; Score ranges: AE, ER, PV, and AS range from 3 to 15, PQ from 11 to 55, and BI from 6 to 30; F value, one-way variance analysis.						

Characteristics	AE	ER	PQ	PV	AS	BI
Undergraduate	13.36 (2.01)	14.05 (1.58)	52.61 (4.37)	14.28 (1.28)	14.29 (1.35)	28.62 (2.58)
Postgraduate and above	14.00 (1.41)	14.29 (1.27)	52.71 (4.21)	14.29 (1.44)	14.14 (1.75)	28.71 (2.55)
F value	1.333	1.628	1.538	1.085	1.026	1.045
P value	0.262	0.181	0.203	0.355	0.380	0.372
History of high altitude travel or residence						
Yes	13.34 (2.02)	13.88 (1.68)	51.91 (4.89)	14.11 (1.43)	14.06 (1.48)	28.16 (2.93)
No	13.49 (1.96)	13.95 (1.66)	52.42 (4.53)	14.23 (1.32)	14.25 (1.37)	28.56 (2.62)
F value	1.088	0.373	2.390	1.493	3.631	4.301
P value	0.297	0.542	0.122	0.222	0.057	0.038
Note: AE, Audience Expectations; ER, Emotional Resonance; PQ, Perceived Quality; PV, Perceived Value; AS, Audience Satisfaction; BI, Behavioral Intention; M, mean; SD, standard deviation; Score ranges: AE, ER, PV, and AS range from 3 to 15, PQ from 11 to 55, and BI from 6 to 30; F value, one-way variance analysis.						

Pearson correlations among six dimensions of satisfaction with health education drama

The six dimensions of satisfaction with the health education drama—audience expectations, emotional resonance, perceived quality, perceived value, audience satisfaction, and behavioral intention—were all significantly positively correlated with each other ($P < 0.01$), as shown in the heatmap in Fig. 1. Among these correlations, audience satisfaction had the strongest association with behavioral intention ($r = 0.90$), while audience expectation had the weakest association with emotional resonance ($r = 0.46$).

Path relationships among six dimensions of satisfaction with health education drama

The SEM assessing the relationships between audience expectations, emotional resonance, perceived quality, perceived value, audience satisfaction, and behavioral intention demonstrated an acceptable fit to the data. The key fit indices were CFI = 0.964, NFI = 0.957, IFI = 0.964, RMSEA = 0.073, indicating a good overall model fit.

Figure 2 shows the final structural model with standardized path coefficients. The arrows between the latent constructs represent the hypothesized direct effects. The indirect effect of one construct on

another is calculated as the product of the standardized coefficients along the connecting paths. For the measurement model, the standardized factor loadings of all items on their respective latent constructs were high and significant, confirming strong convergent validity. Specifically, loadings ranged from 0.89 to 0.94 for audience expectations, 0.82 to 0.94 for perceived quality, 0.87 to 0.93 for emotional resonance, 0.80 to 0.93 for perceived value, 0.94 to 0.95 for audience satisfaction, and 0.90 to 0.93 for behavioral intention.

Table 3 details the standardized path coefficients for the structural model. All hypothesized paths were statistically significant ($P < 0.05$). Key direct effects were identified: The direct effect of audience expectations on perceived quality was significant but relatively weak ($\beta = 0.194$, $P < 0.001$). A significant direct effect of perceived quality on perceived value ($\beta = 0.629$, $P < 0.001$). A strong direct effect of perceived value on audience satisfaction ($\beta = 0.889$, $P < 0.001$). A strong direct effect of audience satisfaction on behavioral intention ($\beta = 0.825$, $P < 0.001$). Strong direct effects of emotional resonance on perceived quality ($\beta = 0.683$, $P < 0.001$), perceived value ($\beta = 0.349$, $P < 0.001$), audience satisfaction ($\beta = 0.065$, $P = 0.043$) and behavioral intention ($\beta = 0.145$, $P < 0.001$) were also supported.

Table 3
Standardized path coefficients for the final model.

Hypothesis	Relationship	β	SE	CR	P	Result
H1	AE $\rightarrow$ PQ	0.194	0.036	7.506	< .001	Supported
H2	PQ $\rightarrow$ PV	0.629	0.058	21.351	< .001	Supported
H3	PV $\rightarrow$ AS	0.889	0.06	25.492	< .001	Supported
H4	AS $\rightarrow$ BI	0.825	0.063	28.944	< .001	Supported
H5	ER $\rightarrow$ PQ	0.683	0.04	23.155	< .001	Supported
H6	ER $\rightarrow$ PV	0.349	0.059	12.124	< .001	Supported
H7	ER $\rightarrow$ AS	0.065	0.065	2.02	0.043	Supported
H8	ER $\rightarrow$ BI	0.145	0.068	5.714	< .001	Supported
Note: AE, Audience Expectations; ER, Emotional Resonance; PQ, Perceived Quality; PV, Perceived Value; AS, Audience Satisfaction; BI, Behavioral Intention.						

Table 4 shows the results of the mediation analysis. The indirect effect of emotional resonance on behavioral intention was significant ($\beta = 0.625$), supporting a model of partial mediation, as the direct effect was also significant ($\beta = 0.145$, 95% CI [0.020, 0.289]). This indicates that emotional resonance influences behavioral intention both directly and through a chain of mediators—namely, perceived quality, perceived value, and audience satisfaction. Similarly, the effect of emotional resonance on perceived value and audience satisfaction was found to be partially mediated. In both cases, significant direct effects ($\beta = 0.349$ for PV; $\beta = 0.065$ for AS) coexisted with significant indirect effects ($\beta = 0.430$ for PV; $\beta = 0.692$ for AS).

Table 4
Mediation model analysis for emotional resonance on outcome variables.

Path relationship	Direct effect (β)	Indirect effect (β)	Total effect (β)	Mediation type	<i>P</i>
ER → PV	0.349	0.430	0.779	Partial	< .001
ER → AS	0.065	0.692	0.757	Partial	0.043
ER → BI	0.145	0.625	0.770	Partial	< .001
Note: ER, Emotional Resonance; PV, Perceived Value; AS, Audience Satisfaction; BI, Behavioral Intention. All coefficients are standardized. Bootstrap confidence intervals and significance tests are based on 5000 resamples.					

Discussion

Principal Findings

This study extended the ACSI model to assess the satisfaction of high-altitude health education dramas and verified the key role of emotional resonance. This study confirms all hypotheses, with SEM demonstrating a good model fit, indicating that the extended ACSI model is suitable for evaluating health education in high-altitude regions. The findings revealed that audience satisfaction is the most proximal and powerful driver of behavioral intentions ($\beta = 0.825$, $P < 0.001$), while perceived value acts as a core mediator of satisfaction, influenced jointly by perceived quality and emotional resonance. These results highlight the synergistic importance of content quality and emotional engagement in health education.

The theoretical significance of this study lies in integrating emotional resonance into the ACSI framework, using new aspects in the quantitative assessment of health education drama. We found that emotional resonance is a strong driver of behavioral intention, exerting both a direct effect ($\beta = 0.145$, $P < 0.001$) and an indirect effect ($\beta = 0.770$, $P < 0.001$) through mediating pathways. The role of emotional resonance extends beyond traditional variables such as audience expectations, suggesting that in health education dramas, emotional factors are more effective than cognitive expectations in driving behavioral change. This discovery is highly consistent with the core theory in the field of health communication[21]. First, it strongly supports narrative transmission theory[22], indicating that emotional immersion in stories enhances information acceptance. Second, from a dual-processing perspective, dramatic narratives primarily operate through the emotion-driven peripheral path, which may be more effective than the rational central path[23, 24]. Moreover, growing empirical evidence confirms that emotional participation is a key mediator in successful narrative interventions, such as trauma intervention[25], HPV vaccination interventions[26, 27], and COVID-19 prevention behaviors[28, 29].

Given that emotional resonance has been proven to be the most crucial predictor of behavioral intentions, during the development stage, the design focus should shift from meeting universal expectations to specifically constructing efficient emotional triggering mechanisms. Overall, the

adoption of the drama format itself is in line with the modern health education concept advocated by the World Health Organization[30], which emphasizes participatory and narrative approaches[31]. The effectiveness of entertainment education narratives has been confirmed by different studies[32–34], which is similar to the high-altitude health education drama.

Specifically, the creative team should primarily invest in emotionally engaging narrative design[35], crafting authentic and relatable characters[36], developing compelling storylines[37], and recreating typical high-altitude dilemmas to deeply evoke emotional resonance in the audience. Dramas can incorporate personalized stories of workers and demonstrate practical skills. Simultaneously, it is essential to ensure the scientific accuracy and quality of the drama content, ensuring that specialized knowledge—such as recognizing high altitude illnesses[38], use of supplemental oxygen[39], and cold weather protection[40]—is based on authoritative medical evidence. Additionally, the drama format can be extended to high-altitude tourism or work populations. Finally, government authorities may integrate such evidence-based health education models into official policy guidelines for occupational health management in high-altitude regions to strengthen comprehensive health protection for workers.

Limitations

This study has several limitations. First, the use of self-report questionnaires may introduce some bias, which might provide socially acceptable rather than completely candid responses. Second, the cross-sectional design establishes associations but cannot determine causal relationships between variables. While we identified strong connections between satisfaction and behavioral intentions, causality cannot be conclusively demonstrated. Third, the sampling method may affect generalizability. Although employing a mixed-mode approach enhanced data accessibility, it might have created selection bias. The exclusive focus on military units in specific regions further limits applicability to civilian populations or other geographical contexts. Finally, while the ACSI model demonstrated good fit, its application to high-altitude health education dramas remains novel. The model might not fully capture all unique aspects of this specific educational context, suggesting the need for further validation in specialized health promotion settings.

Conclusions

This study verified the applicability of the extended ACSI model in the evaluation of high-altitude health education skits. The structural equation model analysis indicated that audience satisfaction is the most direct and crucial factor driving behavioral intention. Perceived value is the core antecedent of satisfaction, and it is significantly influenced by both perceived quality and emotional resonance. Creating high-quality content that can evoke emotional resonance is the key to enhancing the effectiveness of health education dramas and promoting behavioral change.

Abbreviations

ER

emotional resonance
ACSI
American Customer Satisfaction Index
SEM
structural equation modelling
AE
audience expectations
PQ
perceived quality
PV
perceived value
AS
audience satisfaction
BI
behavioral intention
CFI
comparative fit index
NFI
normed fit index
IFI
incremental fit index
RMSEA
root mean square error of approximation
CI
confidence interval

Declarations

Ethics approval and consent to participate

The study was conducted according to the guidelines of the Declaration of Helsinki **and** approved by the ethical committee of Army Medical University (approval: 2025-33-02). Informed consent was obtained from all subjects involved in the study.

Data Availability

The datasets used and analysed during the current study are available from the corresponding author upon reasonable request.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Author's contributions

CZ and JC conceptualized and designed the study. YZ, WT, PJ, EL and JX produced the high-altitude health education drama. CZ, LZ, FL, TL and LL were accountable for data collection and verification. CZ analysed the data and drafted the main body of the manuscript text. YZ, SX, ZQ and JZ participated in the reading and revision of the manuscript.

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Additional Information

Additional file 1. Questionnaire on satisfaction with the high altitude health education drama.

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Figures

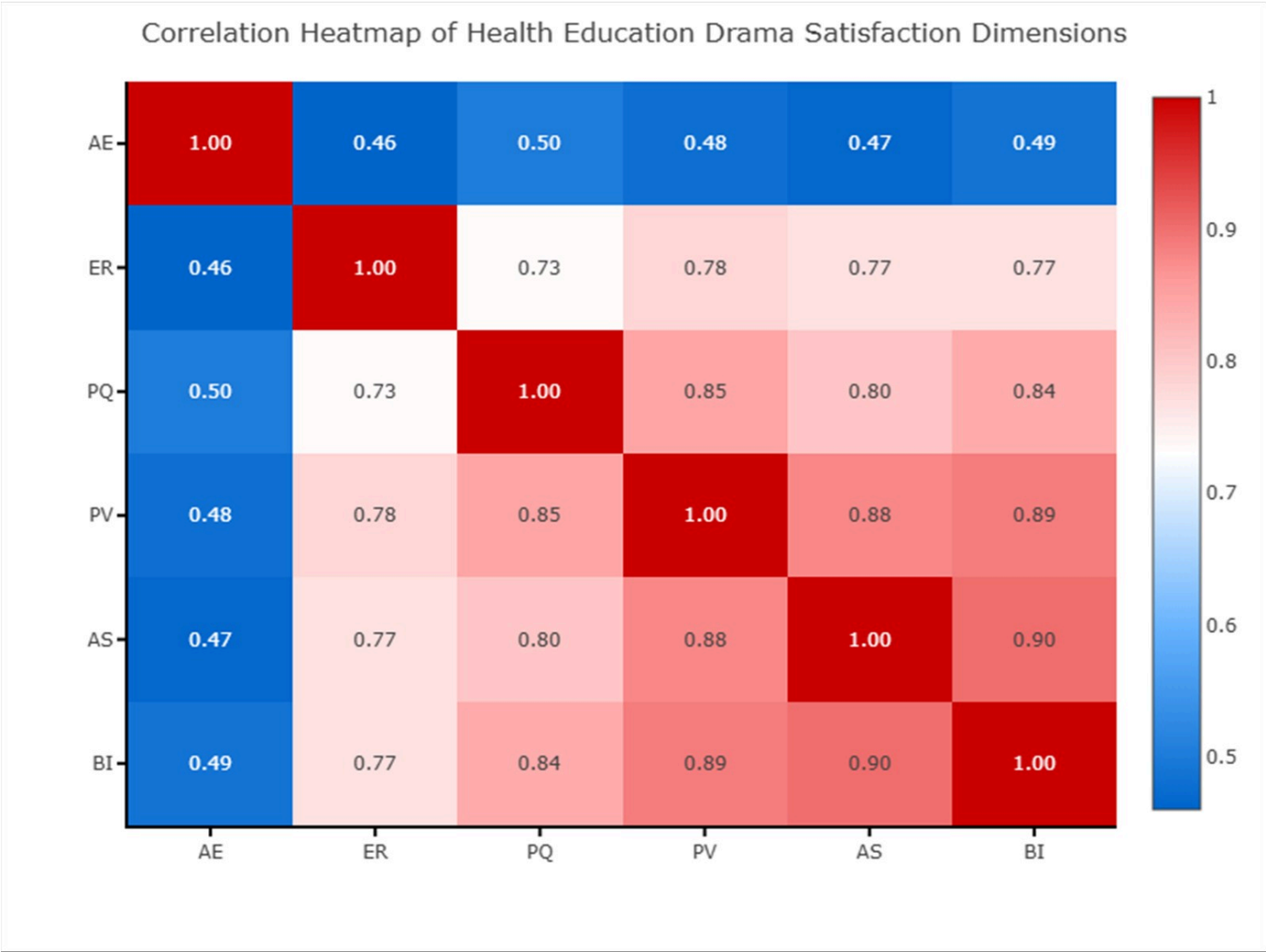
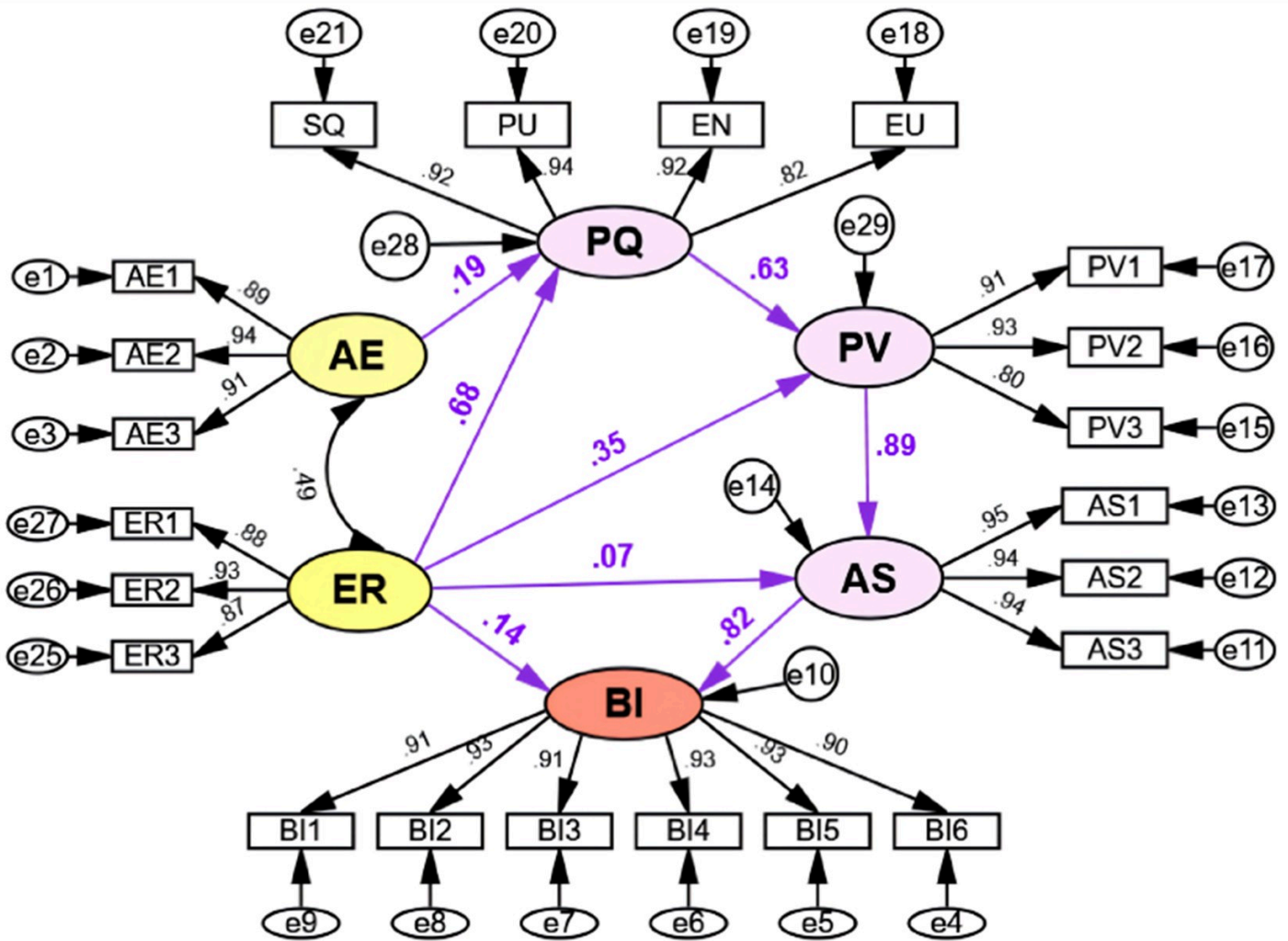


Figure 1

Correlation heatmap of health education drama satisfaction dimensions.



CFI=0.964, NFI=0.957, IFI=0.964, RMSEA = 0.073

Figure 2

The path relationships among dimensions of satisfaction with health education drama. AE, audience expectations; ER, emotional resonance; PQ, perceived quality; PV, perceived value; AS, audience satisfaction; BI, behavioral intention.

Supplementary Files

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- [Additionalfile1.QuestionnaireonSatisfactionwiththeHighAltitudeHealthEducationDrama..pdf](#)