Humanness Index for Designed Experiences

Abstract

In the experience economy, where experiences are meticulously crafted, the measurement of Humanness of these designed experiences holds significant advantages for users, designers, and experience providers.

Humanness comprises of 'human nature' and 'human attributes'. Enhancement and degradation of humanness in an experience, manifests as emotions. The occurrence and absence of these emotions is observable and measurable.

The qualitative segment of this study delves into existing definitions of humanness and emotions. Overlapping this knowledge, one can discern emotions that signal enhancement or degradation of humanness. This can be synthesised into new models for the connectedness and disconnectedness in an experience.

The quantitative phase of the study tests these models by asking 250 participants to rank key emotions and the perceived level of Humanness during the most significant 'peak-experience' of their lives. Statistical tools process this data to generate coefficients linking humanness with emotions.

Further developed into an equation, this measurement of emotions can forecast the Humanness Index of a designed experience. This Index shall serve as a valuable tool for users to make informed choices between different experiences, thereby motivating organisations to prioritise humanness in the design of their experiences.

Keywords

Humanness, Experience Design, Emotion, Humanness Index

Introduction

'The only source of knowledge is experience' ~ Albert Einstein

Purpose

The aim of this study is to make a case for quantifying the humanness of a designed experience. On a practical level, measuring the humanness index allows for meaningful comparisons of user experiences. Additionally, it provides institutions with a means to assess whether the experiences they offer elevate or diminish the level of humanness.

From a societal perspective, this index enhances humanness literacy and contributes to an overall improvement in the quality of designed experiences.

Methodology overview

The methodology for establishing the Humanness Index utilises both qualitative and quantitative research tools.

The initial phase of the research entails the definition of Experiences and Humanness through an study of literature from diverse fields like sociology, design, psychology, science, anthropology, philosophy and ancient scriptures. This literature review expands to an examination of emotions as indicators for enhancing or degrading humanness in experiences. Emotions are approached from three distinct perspectives: science, philosophy, and faith.

Based on the aforementioned discussion, the second phase of the research introduces two models: one for disconnectedness and another for connectedness to the human experience. These models incorporate the ten emotions that closely correspond to observed states.

In the third phase of the research, 250 individuals spanning various age groups and genders are invited to recall their most memorable life experiences, termed peak-experiences. Respondents assess each of the ten emotions, as felt during the experiences. They also provide an overall evaluation of humanness of the experience under consideration.

The final phase employs statistical tools such as VIF analysis, median analysis, single-factor ANOVA, and regression to analyse the data. The analysis generates actionable insights into the measurement of humanness within these experiences.

Value of experience

Many highlight the profound value of human experience.

It is established that, despite the course of evolution, the human race maintains cognitive cohesion (McBrearty, 2013).

This unity is shaped by both nature and culture. Nature represents our innate genetic makeup, while culture refers to acquired patterns. Together nature and culture ensure that, at the most fundamental level, humans are guided by some human universals. These universals consist of features of society, language, behaviour, and mind that, so far as the record has been examined, are found among all peoples known to ethnography and history. The universals may be absolute, conditional, statistical, causal, and more (Brown, 2004).

Given these overarching constants of cognitive cohesion and human universals, it can be inferred that our individual choices may vary, but our rejections tend to align. Overlaying the principle of 'survival of the fittest,' it's reasonable to assume that over centuries, the human race has eschewed experiences that resonate with these universals.

The narrative of a generation is shaped by the collective experiences of its people. Each generation's human experiences are influenced by their temporal context (generational site), exposure to a common era (shared historical location), and generational consciousness in a sociocultural context (Gilleard et al 2002). For example, the consequences of climate change are likely to be a shared experience that will influence the narrative of the current generation.

To build a better world, it is ideal that the experience of each subsequent generation elevate the universals to include growth needs like self-actualisation (Maslow, 1954).

Designed experiences in an experience economy

The connoted meaning of 'experience' conveys the essence of unfiltered life: making choices, living with the outcomes, reflecting upon the experience, gaining wisdom, and ultimately sharing it with others.

However, in contrast to the unfiltered life, we live in an era where experiences have become a thriving economy (Pine et al., 1999). These experiences are carefully curated to influence behaviour, with predetermined objectives in mind. These objectives are determined by institutions that provide these experiences to the users to generate and capture value. In the experience economy, these institutions include but may not be limited to corporations or any organisation that stands to gain from serving the experience to end users.

The process of designing these curated experiences involves heightening anticipation, crafting touch-points that deliver the experience, and channelising reflection (Rossman et al., 2019). These experiences are offered across various domains, that include education, travel, healthcare, retail, and more.

Unfortunately, the end users of these experiences often have limited or no agency in this process. Agency here refers to the sociological construct. More specifically projective element encompasses the process of imagining possible future trajectories of action connected to the actor's hopes, fears, and desires for the future (Emirbayer et al, 1998).

To ensure that we remain connected to humanistic ideals within the experience economy, it's crucial to establish checks and balances. It would be ideal if the users across these domains could have an active voice or agency in deciding upon the objectives.

One effective strategy is to elevate 'humanity literacy,' empowering users to assess the level of humanness in each experience (Deploy et al., 2022). We refer to this as the Humanness Index. Equipped with the awareness about the humanness quotient of an experience, the users can make informed decisions, thereby (re)claiming their agency in the realm of experiences.

Humanness

At this point, it is crucial to establish a clear definition of what encompasses humanness.

Academic comprehension for humanness consists of two facets: Human Nature and Human Attributes. The former encompasses elements such as emotionality, interpersonal warmth, and openness. The latter comprises aspects like civility, refinement, and higher cognition (Haslam et al., 2012).

Infrahumanization occurs when in-group members are more likely to be perceived as more human than individuals from the out-group (Leyens et al., 2001). The concept of humanness transcends the limitation of infrahumanization. This belief can be illustrated from the analysis of online chatter surrounding two photo essays. The first image depicts an Orangutan extending a helping hand to rescue an amateur photographer in snake-infested waters in Borneo (Image1). In another photo essay, a lioness named Kamunyak takes on the role of foster mother to a baby oryx in Kenya's Samburu National Reserve (see Image 2).

Image 1. An Orangutan offering a helping hand to a photographer in a snake infected waters in Borneo

Image 2: Lioness as a foster mother to oryx in Samburu Game Reserve, Kenya

In a survey involving 85 people, respondents unanimously noted that the animals displayed human virtues such as care, compassion, and kindness—qualities often associated with human nature and human attributes. It is reasonable to conclude that when assessing the experience for its Humanness, infrahumanization will not be a deterrent.

Degrading & enhancing humanness

When either or both facets of humanness are compromised, humanness of the experience can be said to have been degraded. Conversely, when with or both facets of humanness are upheld, the resultant humanness quotient of the experience may be said to have been enhanced.

The degradation of Human Nature, components within an experience leads to mechanistic engagement with that experience. Similarly, the degradation of Human Attribute components within an experience leads to an animalistic engagement with the experience (Haslam et al. 2012). Empirical observation suggests, if in a workspace experience, civility, refinement and higher cognition are lowered, the workers may behave in an unruly manner and even cause damage.

Conversely, an experience that enhances Human Nature promotes proactive agency, resulting in judgement of praise. It also cultivates greater moral patience, translating into a willingness to protect. Similarly when an experience enhances Human Attributes, it fosters better self-regulation and heightened cognitive engagement (Haslam et al. 2012). Empirical observation suggests, if in a workspace experience, emotionality, interpersonal warmth and openness are lowered, the workers may not remain invested in the organisation.

The degradation of humanness carries potential risks. This may lead to humans interacting with the environment & each other like machines or animals. On the other hand, enhancing the humanness of an experience has significant advantages like heightened cognition, self-regulation, proactiveness and moral patience.

Therefore, it is vital to have an indicator that assesses enhancers and degraders in the context of the universal principles embodied by humanness.

Emotions as indicators

In an experience, there are two distinct selves: the experiencing self and the remembering self (Kahneman, 2011).

The consequences of the above mentioned advantages and disadvantages of enhancing or degrading of humanness, primarily affect the experiencing self. These emotional effects subsequently become integrated into the remembering self's recollection of the experience (Kannengiesser et al. 2019).

This raises the question of identifying emotions that either degrade or enhance the humanness of an experience. Emotions, akin to colors, encompass a broad spectrum, particularly as we often experience multiple emotions simultaneously (Plutchik, R. 2001).

Recent discussions on emotions reaffirm that they fulfil fundamental needs. Emotions are diverse, subjective, and provide insights into user motives. Creative design processes can operationalise and elicit intricate emotions (Desmet, P. et al. 2022).

A wide range of positive and negative emotions has been identified across various domains, including science, philosophy, and faith.

Emotions in science

Plutchik's Wheel of Emotions (see figure-1) categorises primary, secondary, and tertiary emotions, originating from four fundamental factors: identity, temporality, hierarchy, and territoriality. Primary emotions serve as the core, overlapping to form secondary emotions. Secondary emotions, in turn, overlap to give rise to tertiary emotions (Plutchik, R. 2001). Negative tertiary emotions, stemming from vigilance, rage, loathing, grief, amazement, and terror, may closely relate to actions that degrade the humanness in the experience. Conversely, positive emotions such as ecstasy and admiration may correspond to actions that enhance humanness.

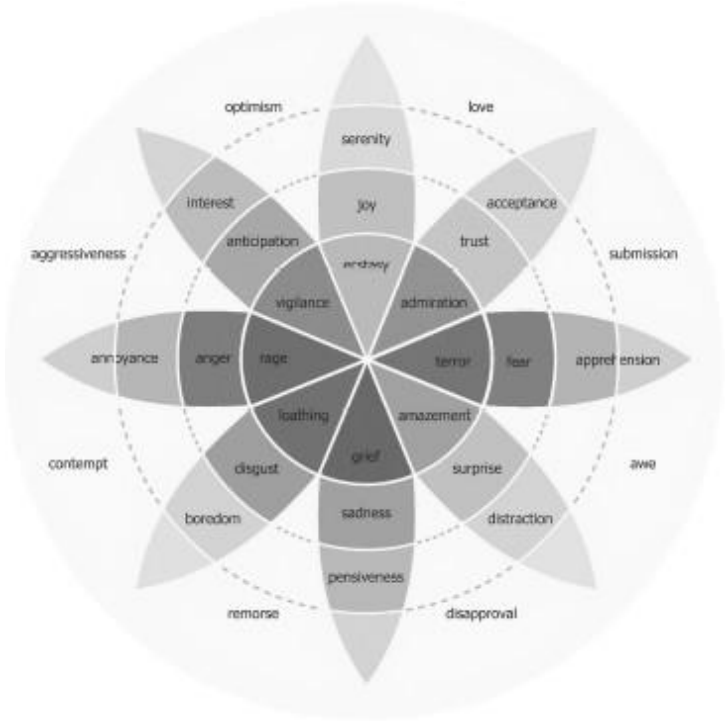

Figure 1. Plutchik's Wheel of Emotions

In contrast to the Plutchik's Model, the Circumplex Model (see figure-2) positions emotions in a circular arrangement along the axes of arousal and valence (Anderson, T. 1998).

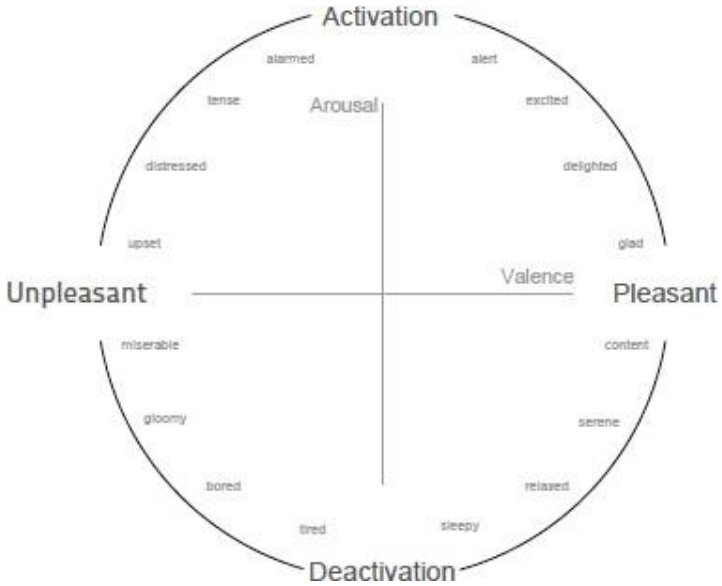

Figure 2. Circumplex model of effect

Emotion in philosophy

Philosophers such as Confucius and Aristotle have explored the concepts of humanness and human emotions. Confucius emphasised the five Wuchang (constants) of Humanness, Righteousness, Proper Rite, Knowledge, and Integrity (see figure-3). These have become fundamental for many Chinese people, especially intellectuals (Csikszentmihalyi, M. 2021). Aristotle, on the other hand, identified a range of emotions corresponding to the sphere of

feelings (Papouli, E. 2018). He identified various feelings within Aristotle's 'golden mean,' (see figure-4) highlighting deficiency and excess as indicators of vice. He also emphasised a state of balance as the best path for both individuals and society to follow.

Figure 3. Confucian Wachang (constants)

Sphere of feeling or action	Deficiency (vice)	Mean (virtue)	Excess (vice)
Fear and confidence	Cowardice	Courage	Rashness
Pleasures and pains	Insensibility	Temperance	Self-indulgence
Getting and spending(minor)	Stinginess/miserliness	Generosity	Extravagance
Getting and spending (major)	Pettiness	Magnificence	Vulgarity
Honour and dishonour (major)	Vanity	Proper pride	Pusillanimity
Honour and Dishonour (minor)	Lack of Ambition	Proper ambition	Ambition
Anger	Lack of spirit	Good temper	Irascibility
Social conduct	Surliness	Friendliness/civility	Obsequiousness
Self-expression	Mock modesty	Truthfulness	Boastfulness
Conversation	Boorishness	Wittiness	Buffoonery
Shame	Shamelessness	Modesty	Shyness
Indignation	Envy	Proper indignation	Spite

Figure 4. Aristotle's golden mean, Nicomachean Ethics Book II

Emotion in faith

In most faiths, a distinction is made between virtuous and immoral actions, with intentions closely tied to emotions. These belief systems are deeply embedded in human understanding of the world, encapsulating the higher purpose sought by society. Understanding these belief systems lead to identifying emotions that enhance or degrade humanness.

In the Buddhist tradition, the notion of wholesomeness and unwholesomeness is associated with kleshas such as attachment, aversion, ignorance, pride, and jealousy. The ancient Upanishads, Jain scriptures such as Tattvartha Sutra and Buddhist suttas, have references to four Brahma-viharas (Thanissaro 2006) ,: Metta (loving-kindness), Karuna (compassion), Mudita (sympathetic joy), and Upekha (equanimity) (see figure-5).

Figure 5. Brahma viharas

Emotion and connection with the experience

Emotions mirror our feelings, and experiences hold the ability to mould these feelings. When the enhancement of humanness results in heightened cognition, self-regulation, proactiveness, and moral patience, it signifies that the user is deeply connected with the meaning the experience imparts. Conversely, when the degradation of humanness leads to a mechanistic, animalistic mode of engagement, it suggests that the user is detached from the essence of the experience. In such instances, the user may be partially absent and distracted (mechanistic) or driven by maximalistic objectives (animalistic).

To truly comprehend the concept of humanness within a designed experience, a specific model is required, one that is founded on the connectedness or disconnectedness of the experiencing self within that experience. This paper introduces a theoretical framework, drawing from empirical observations and the authors' own experience as designers of experiences.

The selection of emotions in the model and the exploration of connectedness and disconnection are broadly influenced by Plutchik's wheel of emotions. However, informed modifications have been made by considering overlaps with the Confucian Wuchangs, Aristotle's golden mean, and Buddha's Brahmaviharas in the articulation of these emotions.

Model of disconnectedness

When the experiencing self becomes disconnected in an experience, mechanistic and animalistic inclinations may emerge. Mechanistic involvement occurs when one is detached or only partially engaged in an experience. Animalistic involvement takes place when personal motives supersede the broader context (Haslam et al. 2012).

A model of disconnectedness considers three spokes; detachment, dampened involvement, and maximisation (see figure-6).

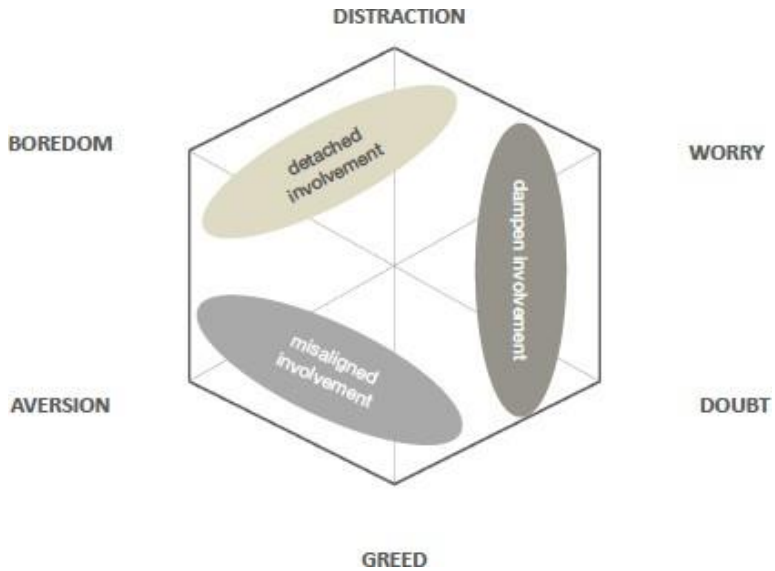

Figure 6. Proposed Model of disconnectedness in an experience

In detachment, one may be physically present but mentally detached, often indicated by emotions like distraction and boredom. Disconnection can also result from dampened involvement, where worry and doubt come into play. The third spoke of disconnection involves maximisation. In such case, emotions such as greed and aversion indicate disconnection with the core experience.

Model of connectedness

When the experiencing self connects, it fosters virtues like proactiveness, a disposition for praise, and a sense of protection.

A model of connectedness requires an examination of the participants in an experience and the emotions tied to positive outcomes (refer to Figure 7). At its core lies the 'Self.' Without mechanistic and animalistic attributes, the experiencing self harmonises with the elements of the experience with serenity. The second ring symbolises 'Someone,' the active participant who interacts with the experiencing self, and emotions like acceptance and compassion indicate a higher-quality engagement. The third ring of connectedness includes the 'Anyone,' covering passive participants. Emotions signifying participative joy hint at the enhancement of human attributes. As experiences shape our collective narrative, the model encompasses a world-centric ring, involving 'Everyone.' Emotions related to the greater good function as indicators of whether an experience enhances humanness.

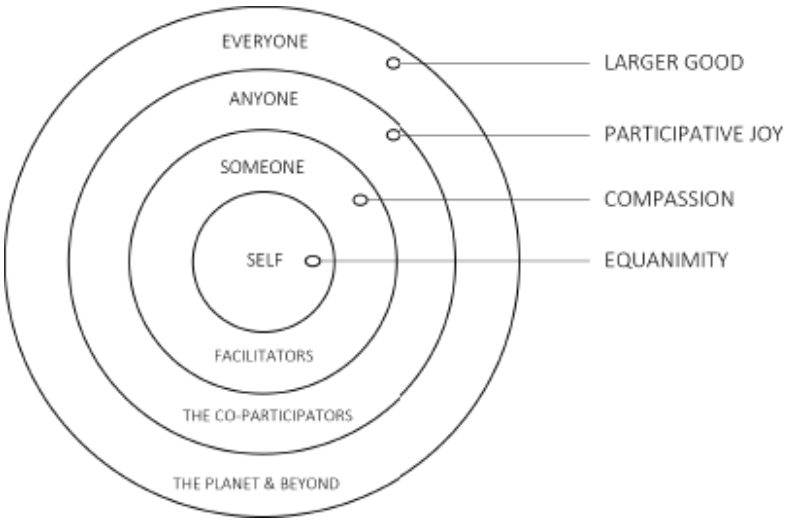

Figure 7. Proposed Model of connectedness in an experience

Primary study

To affirm these models, the emotions described above were drafted into a peak-moment analysis questionnaire (see figure 8). The peak experience, in this context was described as the most memorable experience for the particular respondent. This questionnaire was conducted in person and encouraged respondents to tap into their memories to recall a peak experience. Upon revisiting the peak experience, participants assessed emotions connected to the degradation and enhancement of humanness using a 10-point scale. Lastly, participants ranked the Humanness Index for the peak experience.

Experience Questionnaire

1 Your name

_____

2 Age (mark only 1 oval)

o 12-17
o 18-24
o 25-30
o 31-45
o 46-60
o Above 60

3 Take a pause and reflect upon a significant moment in your journey. List down the moment

_____
_____
_____
_____
_____
_____

Thinking about how you've felt during the experience respond to the following:

(Rate on the scale of 0-10, where 10 being the highest)

4 Did you sense any feeling of dislike(aversion) during the experience?

(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0 Non-aversion	1	2 slight aversion	3	4 moderate aversion	5	6 aversion	7	8 strong aversion	9	10 extreme aversion
Aversion	o	o	o	o	o	o	o	o	o	o	o

5 Did you experience greed in a way that was beyond the protocol?

(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0 Non-greedy	1	2 slight greedy	3	4 moderate greedy	5	6 greedy	7	8 strong greedy	9	10 extreme greedy
Greed	o	o	o	o	o	o	o	o	o	o	o

6 Did you ever worry about what may not be in line with your expectations during the experience?

(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0 Not-worried	1	2 slightly worried	3	4 moderately worried	5	6 worried	7	8 highly worried	9	10 extremely worried
Worry	o	o	o	o	o	o	o	o	o	o	o

7 Did you feel the slightest of doubt that may have upset you during the experience?

(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0 Not at all doubtful	1	2 slight doubtful	3	4 moderately doubtful	5	6 doubtful	7	8 very doubtful	9	10 extremely doubtful
Doubt	o	o	o	o	o	o	o	o	o	o	o

8 Did you sense distractions that could have blocked your mind in the experience??

(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0 Not at all distracted	1	2 slight distracted	3	4 moderately distracted	5	6 distracted	7	8 very distracted	9	10 extremely distracted
Distraction	o	o	o	o	o	o	o	o	o	o	o

9 Did boredom strangle your mind during the experience?

(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0 Not at all bored	1	2 slight bored	3	4 moderately bored	5	6 bored	7	8 very bored	9	10 extremely bored
Boredom	o	o	o	o	o	o	o	o	o	o	o

Thinking about how you've felt during the experience respond to the following:

(Rate on the scale of 0-10, where 10 being the highest)

10 Were you ever in a serene state of mind during the peak moment?

(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0 Non-serene	1	2 slightly serene	3	4 moderately serene	5	6 serene	7	8 highly serene	9	10 extremely serene
Serene	o	o	o	o	o	o	o	o	o	o	o

Experience Questionnaire (cont'd)

11 Were you able to feel compassion for those interacting with you during the peak moment??
(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0 Non-compassionate	1	2 slightly compassionate	3	4 moderately compassionate	5	6 compassionate	7	8 highly compassionate	9	10 extremely compassionate
Compassionate	O	O	O	O	O	O	O	O	O	O	O

12 Were you able to feel the larger good during the peak moment?
(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0 Not at all	1	2 slight	3	4 moderate	5	6 high	7	8 severe	9	10 extreme
Larger good	O	O	O	O	O	O	O	O	O	O	O

13 Did you feel the participative joy for others who may be experiencing the same during the peak moment?
(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0 Not at all	1	2 slight	3	4 moderate	5	6 high	7	8 severe	9	10 extreme
Participate joy	O	O	O	O	O	O	O	O	O	O	O

14 If humanness is a virtue linked with love and compassion derived from the human condition. How would rate the overall experience?
(Rate on the scale of 0-10, where 10 being the highest) Mark only one oval per row.

	0	1	2	3	4	5	6	7	8	9	10
Humanness	O	O	O	O	O	O	O	O	O	O	O

Figure 8: Parameters that Enhance & Degrade Humanness: Questionnaire for Peak Experiences

The primary study included a demographic sample of 250 respondents, comprising 50.8% men and 49.2% women across various age groups, 18-60+ years (see Table-1).

Classification	Total Number	Frequency (%)
Gender		
Male	127	50.8
Female	123	49.2

Classification	Total Number	Frequency (%)	Sub-Group	Total Number	Frequency (%)
Age Group					
18-24	55	22.0	Male	21	38.2
			Female	34	61.8
25-30	53	21.2	Male	29	54.7
			Female	24	45.3
31-45	55	22.0	Male	30	54.5
			Female	25	45.5
46-60	56	22.4	Male	22	39.3
			Female	34	60.7
Above 60	31	12.4	Male	25	80.6
			Female	6	19.4

Table 1. Demographic Analysis for primary research sample of 250

Results

The study yielded promising outcomes.

Analysis-1: Multicollinearity - Multicollinearity occurs when two or more variables exhibit high correlation, which can undermine statistical reliability. To test for multicollinearity, the Variance Inflation Factor (VIF) was calculated to measure the degree of association among variables.

Serious multicollinearity is identified if the VIF exceeds 10. However, in the study, all variables have a maximum VIF of 2.04, indicating weak correlation between independent variables, therefore no significant multicollinearity was observed (see Table-2).

Variable	Variance Inflation Factor (VIF)
D1 Aversion	1.94
D2 Greed	1.75
D3 Worry	1.80
D4 Doubt	2.03
D5 Distraction	1.95
D6 Boredom	1.63
E1 Serene	1.32
E2 Compassion	1.62
E3 Larger Good	1.75
E4 Participative Joy	1.72
Gender	1.06
Mean VIF	**1.69**

Table 2. Multicollinearity Analysis

Analysis-2: Gender Preferences - Median analysis illustrates the relevance of variables to the respondents (see Table-3). There is a visible variation in the median analysis for the respective genders. Gender, coded as 1 for females and 0 for males shows that, ceteris paribus, females have a humanness score 0.24 points higher than males, all other factors being equal (see Table-7).

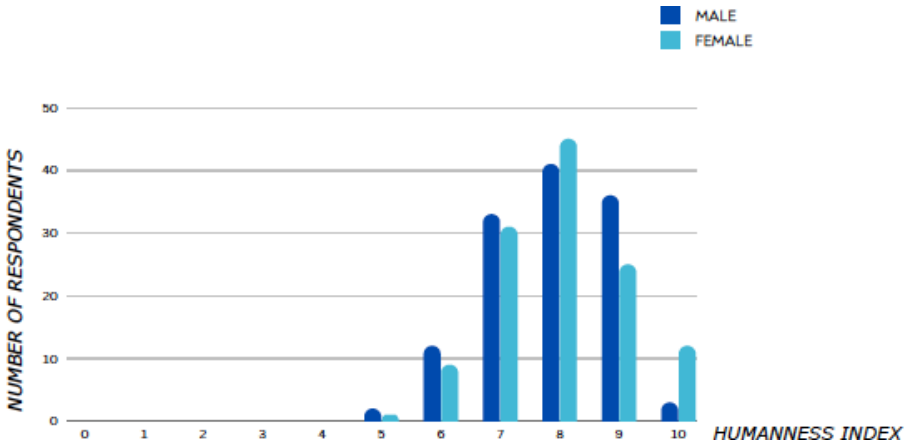

Table 3. Median Analysis for Humanness Index

Analysis-3 : Relevance of Variables - In the analysis of median emotions (see Table- 4 & 5), it is evident that each listed emotion, whether contributing to the degradation or enhancement of humanness, holds significance. This is affirmed by non-zero value for each emotion, chosen by one or more respondents. This indicates that some respondents experienced these emotions at various points during the peak-experience.

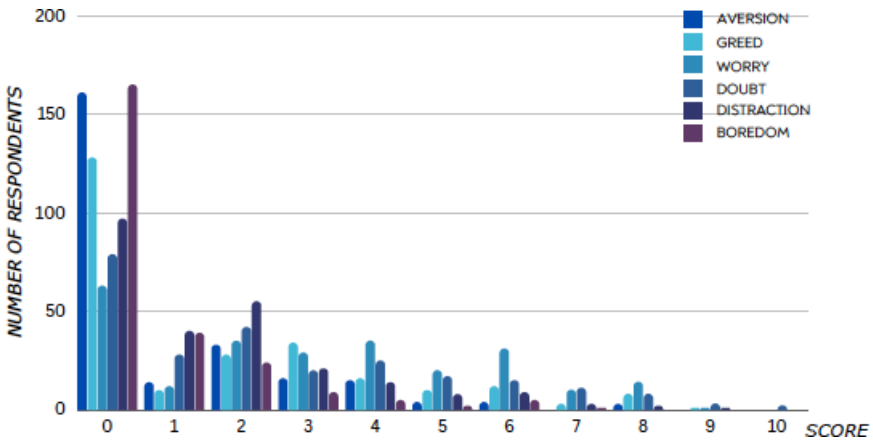

Table 4. Median Analysis for emotions that indicate degradation of Humanness

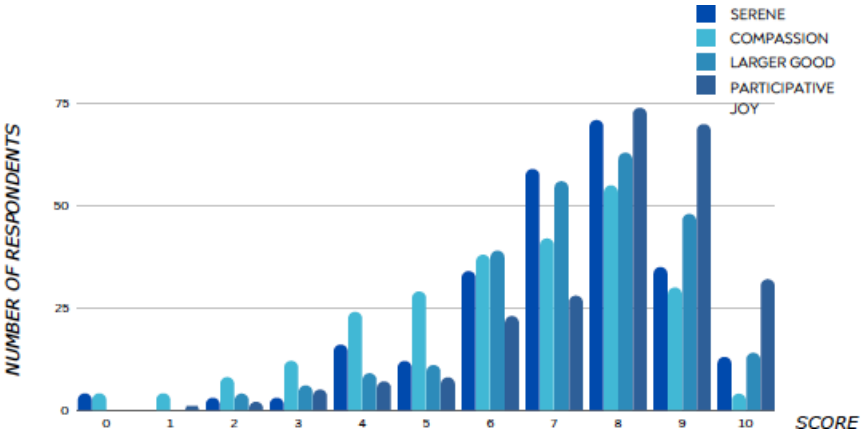

Table 5. Median Analysis for emotions that indicate enhancement of Humanness

Analysis-4: Pattern in Median of Scores - For peak experiences, median scores for degrading emotions tend to be lower, with many respondents scoring zero for one or more degrading emotions. Conversely, median scores for enhancing humanness tend to be high, with fewer respondents ranking the emotions that enhance humanness below five (Table-4 & 5).

Analysis-5: Analysis of Variance - The mean humanness score is 7.90 with a reported variance of 1.17 (see Table-6), indicating that data is concentrated around 8.0. While peak experiences may vary qualitatively, a common feature in exceptionally memorable experiences is a high level of Humanness.

SUMMARY

Groups	Count	Sum	Average	Variance
H [Humanness]	250	1976	7.904	1.179502
D1 [Aversion]	250	256	1.024	2.826731
D2 [Greed]	250	448	1.792	5.233671
D3 [Worry]	250	786	3.144	6.364723
D4 [Doubt]	250	635	2.54	6.514458
D5 [Distraction]	250	409	1.636	3.549703
D6 [Boredom]	250	181	0.724	1.782956
E1 [Serene]	250	1769	7.076	3.500225
E2 [Compassion]	250	1569	6.276	4.746811
E3 [Larger good]	250	1819	7.276	2.899422
E4 [Participative joy]	250	1964	7.856	2.983197

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	21860.47	10	2186.047	578.2999	0	1.83415
Within Groups	10353.77	2739	3.780127			
Total	32214.24	2749				

Table 6. Single Factor ANOVA Analysis for factors that Degrade (D1-6) & Enhance (E-1-2) Humanness

The ANOVA (analysis of variance) reveals a near-zero p-value, strongly suggesting that the factors compared in the analysis have a statistically significant impact on the dependent variable. This also implies that observed mean differences are not mere chance occurrences but are associated with the specific factors under investigation.

Analysis-6: Regression Analysis - Among the ten analysed emotions, six demonstrate a noteworthy impact (see Table-7).

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.56884
R Square	0.32358
Adjusted R Square	0.29232
Standard Error	0.91362
Observations	250

ANOVA

	df	SS	MS	F	Significance F
Regression	11	95.0355	8.639599	10.350449	1.95E-15
Residual	238	198.6604	0.834708		
Total	249	293.696			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	4.18092195	0.41867	9.986146	7.723E-20	3.356145	5.005698	3.356145	5.005698
D1 [Aversion]	0.10309169	0.04795	2.149961	0.032561	0.00863	0.197553	0.00863	0.197553
D2 [Greed]	0.08095553	0.033477	2.418238	0.016347	0.015006	0.146905	0.015006	0.146905
D3 [Worry]	0.01350414	0.03082	0.438163	0.661665	-0.04721	0.074219	-0.04721	0.074219
D4 [Doubt]	0.00382279	0.032356	0.118149	0.906049	-0.05992	0.067563	-0.05992	0.067563
D5 [Distraction]	-0.0152661	0.042879	-0.35603	0.722134	-0.09974	0.069204	-0.09974	0.069204
D6 [Boredom]	-0.0817654	0.055298	-1.47863	0.140562	-0.1907	0.027171	-0.1907	0.027171
E1 [Serene]	0.08464088	0.035511	2.38354	0.017932	0.014686	0.154596	0.014686	0.154596
E2 [Compassion]	0.04277341	0.033822	1.264649	0.207234	-0.02386	0.109403	-0.02386	0.109403
E3 [Larger good]	0.01156097	0.044996	0.256936	0.79745	-0.07708	0.100201	-0.07708	0.100201
E4 [Participative joy]	0.3098267	0.043966	7.046984	1.96E-11	0.223215	0.396439	0.223215	0.396439
Gender	0.24179974	0.118928	2.033168	0.043145	0.007515	0.476085	0.007515	0.476085

Table 7. Regression Analysis for factors that Degrade (D1-6) & Enhance (E-1-2) Humanness along with Gender

Four of these emotions, namely Aversion (p-value 0.032), Greed (p-value 0.016), Serenity (p-value 0.017), and Participative Joy (p-value nearly zero), exhibit high statistical significance. These emotions also feature substantial coefficients. For instance, Participative Joy (0.30) significantly enhances humanness. Emotions like Serenity (0.08), Greed (0.08) and Aversion

(0.10) are also found to be relevant to the level of humanness experienced during peak moments. Two more emotions, Compassion (0.04) and Boredom (0.08) have good coefficients (see Table-7).

Analysis-7: R-square for social research - Importantly, the R-square value of 0.323 (see Table-7) falls within the acceptable range for predictive analysis in social research (0.10 to 0.50), suggesting that the regression equation can potentially be used to predict the level of humanness in lived experiences (Ozili, 2023).

Conclusion

In conclusion, the Humanness Index represents a promising approach to bridge an unrecognised gap, propelling the collective human experience to new heights of enhanced humanness across generations.

Application

This research holds two essential applications: feedback and feedforward.

1. In the feedback application, users could be asked to reflect on their experiences and evaluate the emotions they have felt during that period. When this data is fed into a regression model, it will generate a Humanness Index for the experience. This Index can be made available to the public for the benefit of future users who wish to make informed choices when selecting experiences. For instance, when choosing a school for a child or a family trip, individuals are likely to prioritize experiences with a higher Humanness Index.
2. In the feedforward application, potential users (the test group) would go through the experience within a simulated environment, whether it's in the real world or simulated using somatic or digital interventions. Simultaneously, a control group will go through a benchmark experience. Both groups will rank emotions that either degrade or enhance humanness in the experience. Visual representations like spread plots (see Figure 9 & 10) can be used to visually represent the humanness quotient of the experience. Designers of the experience will then be able to refine the touchpoint journey to enhance these parameters, and institutions can use this index to improve the quality of the experiences they offer.

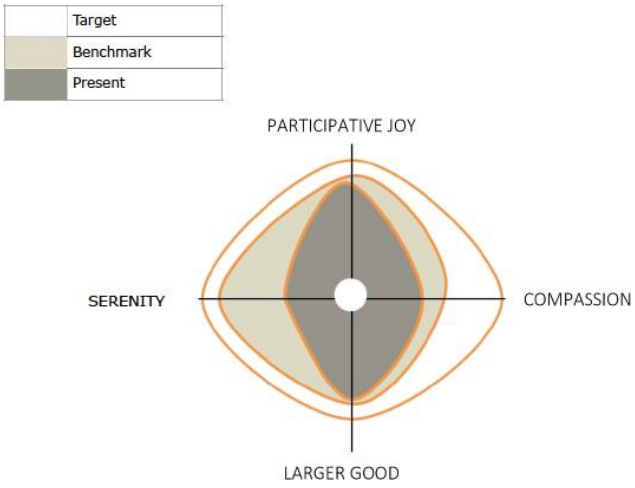

Figure 9. Reference Diagram Parameters that Enhance Humanness : Comparative chart for present, benchmark & improved humanness in experience

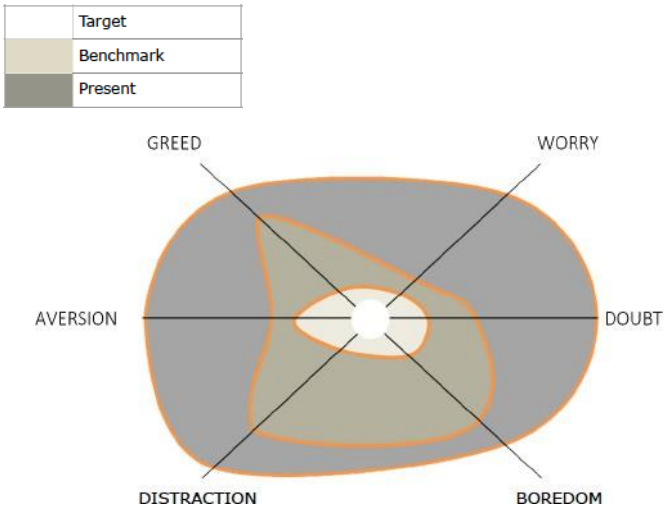

Figure 10. Reference Diagram Parameters that Degrade Humanness : Comparative chart for present, benchmark & improved humanness in experience

Future work

Moving forward, it may be worthwhile to delve into a focused analysis of particular peak (negative) experiences characterised by low humanness scores. Investigating whether the medians for degradation shift in these specific instances could yield valuable insights.

It's also worth acknowledging that the present sample size is relatively limited. With an increase in the sample size, it is expected that the accuracy in assessing the significance of variables would be improved. With a larger sample size, the coefficients would become robust and an R-square value of 0.323 may also improve. Furthermore, a larger dataset would allow for a more comprehensive understanding of how these factors fluctuate in relation to gender and age.

This study needs to be done with diverse groups across continents, cultures, education level and income level. The study could investigate if these variables cause is a significant difference in the relation between the reported intensity of the emotions and the resultant Humanness Index of the experience.

Designed experiences are spread over physical, digital and virtual mediums. The mediums have their strengths and shortcomings. These are bound to impact connectedness and disconnectedness for the user. In future, a further study could investigate the impact of medium on the Humanness of the designed experience.

Contributions

Jasleen Manrao helped in the initial idea, which was presented in the Seven Experiences summit, at BYU, Utah in 2022.

Shubham Rangile, supported by Surbhi Bapna & Srushti Karwa helmed the survey.

Seema Gupta lent her expertise to critique the data analysis process and suggest additional statistical tools.

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