EDICIONES COMPLUTENSE

Arte, Individuo y Sociedad
ISSN: 1131-5598 • e-ISSN: 1131-5598

ARTÍCULOS

Applying an adapted theory of planned behavior to visiting art exhibitions

António M. Duarte
University of Lisbon, Portugal
Niki P. Konstantinidi
University of the Aegean, Greece
Teresa A. Rocha
ISPA – University Institute, Portugal

https://dx.doi.org/10.5209/aris.102756 Recibido: 14 de mayo de 2025 / Aceptado: 8 de noviembre de 2025

Abstract: The objective was to test the applicability of an adapted form of the Theory of Planned Behavior (TPB) to the behavior of visiting art exhibitions. A sample responded to a questionnaire on intention and behavior to visit art exhibitions, and on attitudes, subjective social norms, perceived behavioral control and motives related to such behavior. After an exploratory principal components analysis and a reliability analysis, a path analysis was used to test the previewed model. Responses to an additional open question on motives were subjected to thematic analysis. Results partially confirmed the application of TPB to visiting art exhibitions, with subjective social norms, perceived behavioral control and motives with an indirect significant effect on behavior mediated by intention. Subjective social norm had also a significant effect on behavior, while a gap was found between the latter and intention. Furthermore, a variety of motives for visiting art exhibitions were identified. Results help to understand and suggest ways to reduce the mentioned gap and increase the behavior of visiting art exhibitions, considering its potential for personal development and quality of life.
Keywords: Art; Motives; Theory of Planned Behavior; Visiting Art Exhibitions

ESP Aplicando una teoría adaptada del comportamiento planeado al visitar de exposiciones de arte

Resumen. El objetivo fue evaluar la aplicabilidad de una adaptación de la Teoría del Comportamiento Planeado (TCP) al comportamiento de visitar exposiciones de arte. Una muestra respondió a un cuestionario sobre intención y comportamiento de visitar exposiciones de arte, así como sobre actitudes, normas sociales subjetivas, control conductual percibido y motivos relacionados con dicho comportamiento. Después de un análisis exploratorio de componentes principales y un análisis de fiabilidad, se utilizó un análisis del camino para evaluar el modelo previsto. Las respuestas a una pregunta abierta adicional sobre motivos se sometieron a un análisis temático. Los resultados confirmaron parcialmente la aplicación de la TCP al comportamiento de visitar exposiciones de arte, con normas sociales subjetivas, control conductual percibido y motivos con un efecto significativo indirecto sobre el comportamiento mediado por la intención. La norma social subjetiva también tuvo un efecto significativo sobre el comportamiento, si bien se encontró una brecha entre esta última y la intención. Además, se identificaron diversos motivos para visitar exposiciones de arte. Los resultados ayudan a comprender y sugerir maneras de reducir dicha brecha y a mejorar el comportamiento de visitar exposiciones de arte, considerando su potencial para el desarrollo personal y la calidad de vida.
Palabras clave: Arte; Motivos; Teoría del Comportamiento Planeado; Visitar Exposiciones de Arte

Cómo citar: Duarte, A. M., Konstantinidi, N. P., & Rocha, T. A. (2026). Applying an adapted theory of planned behavior to visiting art exhibitions. *Arte, Individuo y Sociedad, 38*(1), 71-80. https://dx.doi.org/10.5209/aris.102756

1. Introduction

Visiting art exhibitions is a significant factor of life's quality and personal development. Nevertheless, the behavior of visiting art exhibitions, which is affected both by external and internal factors, is low in the general population. Analyzing such a behavior through the lenses of the Theory of Planned Behavior – TPB (Ajzen, 1991; Fishbein & Ajzen, 2010), which considers a variety of factors that affect the intention of any action, might allow a comprehension on the dynamics of visiting art exhibitions and give clues on how to increase it.

1.1. Visiting Art Exhibitions

The behavior of visiting art exhibitions is an instance of so called "passive or receptive" arts participation, defined as the appreciation of arts' events and situations. This type of arts participation differs from the so designated "active" forms, such as the creation of art, expression/interpretation of existing works of art, curation (i.e., selecting, organizing and collecting art), intellectual engagement in it (e.g., reading about arts), or membership and donation to arts' institutions (Brown, 2004; Tepper & Gao, 2008). Nevertheless, the previous discrimination is independent of the fact that appreciating the arts is also an active and creative process (e.g., Tinio, 2013)

1.2. Value of Visiting Art Exhibitions

Reviews on the effects of visiting art exhibitions, particularly in museums (Cotter & Pawelski, 2021; Barry et al., 2024), indicated an association between such visitation and decreases in ill-being effects (i.e., stress; depression; loneliness), increases in well-being (i.e., positive emotions; feelings of restauration and belonging, quality of life), and improvements in social connectedness (i.e., forming connections with others).

Besides, as an instance of arts participation, visiting art exhibitions probably provides most of the same advantages. Based on a set of studies on the value people attribute to arts participation, Brown (2004) identified eight possible benefits of such participation: aesthetic (quality of life improvement); physical (body skills development, and body-mind integration); emotional (mediation of feelings); cognitive (brain engagement, imagination activation, and cognitive skills development); socio-cultural (connection with community's culture, and understanding other cultures); political (articulating and stating political opinions); spiritual (spiritual enrichment); and identity formation (like self-confidence or self-esteem).

Moreover, visiting art exhibitions probably shares the advantages museums offer to the public, which include offering free-choice experiences (Falk & Dirking, 1992), aesthetic, authentic, inspirational, learning experiences, not accessible in other ways (Kotler et al., 2008), and contributions to the quality of life (Yamada & Fu, 2012).

1.3. Frequency of Visiting Art Exhibitions

The overall picture of the level of engagement of the population with the arts is one of low participation, despite its potential. A 2013 survey of a large sample of EU citizens on their participation in various cultural activities (TNS Opinion and Social, 2013) revealed that only 37% of respondents had visited a museum or gallery in the past 12 months. Similarly, a survey conducted in the USA revealed that in 2008 only 22.7% of respondents had visited an art museum or gallery during the past 12 months (Roose & Daenekindt, 2015). Nevertheless, visiting art exhibitions, especially those in museums, is an expressive activity for some segments of the population, as evidenced by the fact that in 2019, more than sixty million people visited the ten most popular museums in the world (Sharpe & Da Silva, 2020, as cited in Barry et al., 2024).

There are huge individual differences in the extent to which people appreciate art in general and visit art exhibitions in particular. For example, a study of visitors to art museums made it possible to construct a typology that distinguishes a general group of people who are more passive or distant in relation to the arts, from another group of people who are more involved (Hanquinet, 2013).

1.4. Factors of Visiting Art Exhibitions

Considering the factors that explain art appreciation, visiting art exhibitions can be considered a result of both a person's external and internal factors.

Regarding the external factors, several studies that have examined the sociodemographic correlates of cultural participation indicate that education (which is related to socioeconomic status) is the most prominent variable (McCarthy et al., 2001). More recently, reflecting on the external factors of cultural participation, parental socialization, and childhood cultural exposure (active and unconscious, through modelling, resources provision, etc.) have been considered critical specific factors (Ursin, 2016). This is because, despite a growing expansion both of the provision of cultural activities and of preconditions of cultural participation (e.g., education, income, and leisure time), such participation has not increased (Ursin, 2016). Nevertheless, it has been observed that children's own values and personalities can influence their cultural activities, compensating for families' limitations, or hindering families' opportunities (Chin & Phillips, 2004). Moreover, in late infancy and adolescence family-external socialization agents, like peers, start to exert a significant influence on cultural participation (Ursin, 2016), that can possibly develop further throughout life, within a variety of socialization contexts, independently from what is inherited from the family (DiMaggio, 1982).

Similarly, a variety of contextual practical factors seem to influence the specific behaviors associated with arts participation, such as information, accessibility, programming, and cost (McCarthy et al., 2001; Yamada & Fu, 2012).

1.5. Appreciating the Arts as Planned Behavior

In addition to the external factors of visiting art exhibitions, according to a number of theories that focus on the determinants of behavior or action, behavioral intention (i.e., the intention to engage in such behavior or action, eventually to reach a goal), such as the intention to appreciate the arts, is pivotal. Actually, to varying degrees, behavioral intention is considered central by the Attitude-Behavior theory (Triandis, 1980), Protection Motivation Theory (Rogers, 1983), the Social Cognitive Theory (Bandura, 1997), and in the specific framework of the present study - the Theory of Planned Behavior – TPB (Ajzen, 1991; Fishbein & Ajzen, 2010).

Applying the TPB (Ajzen & Fishbein, 1980; Ajzen & Madden, 1986; Fishbein & Ajzen, 2010) to the behavior of appreciating the arts, the immediate antecedent of that behavior is the behavioral intention to appreciate the arts (e.g., visiting art exhibitions), which expresses the motivation or readiness to do so. In turn, the behavioral intention to appreciate the arts mediates the effects of three social-cognitive factors, that may have an unequal strength for different behaviors: attitude, subjective norm, and perceived behavioral control. Following the theory (Ajzen, 1985, 1991), attitude here refers to the personal value of appreciating the arts, including affective (intrinsic and extrinsic) gratification expectations of such appreciation (Tefertiller, 2017). Subjective norm refers to the perceived social value and pressure of such appreciation, particularly from significant others, and is more relevant when such appreciation is social (Trafimow & Finlay, 1996) and situated in collectivist cultures (Broeder & Stokmans, 2013). Finally, perceived behavioral control refers to the perception of the ease or difficulty of appreciating the arts, regarding aspects such as opportunity (e.g., exhibition supply), cost, time, transportation, or involved appreciation abilities/handicaps, skills, and knowledge. Moreover, in the same theoretical perspective (Fishbein & Ajzen, 2010), these three factors of the intention to appreciate the arts are each influenced by three types of beliefs: behavioral beliefs (about the probable consequences of that appreciation); normative beliefs (about the social context's normative expectations regarding appreciation of the arts); and control beliefs (about the presence of facilitators or obstacles for that appreciation). It is worth noting that applying the TPB perspective to explain arts appreciation behavior does not disregard the influence of socioeconomic status or educational context, here seen as background factors that influence these beliefs through knowledge, values, preferences and resources (Ursin, 2016). Nevertheless, following the same perspective (Fishbein & Ajzen, 2010), such background factors can be considered as much less (and insufficiently) predictive of arts appreciation behavior, since its influence is mediated by more proximal factors of such behavior. Moreover, following Kooh et al. (2017) and Miesen (2003), it can be hypothesized that when there is a habit (past behavior) of appreciating the arts, the intention to engage in this behavior may be higher and less based in a conscious cognitive effort, but rather on the retrieval of stored beliefs, attitudes, perceptions, and intentions.

Applying the TPB to explain arts appreciation behavior can also help to clarify the possible factors of an *intention-behavior gap* in this area. In general terms, the *intention-behavior gap* means that intentions seldom explain all the variance in behavior (Sheeram, 2002). For example, a meta-analytical review of studies of the TPB on a variety of behaviors (Armitage & Conner, 2001), found that intentions explained between 18 and 23% of the variance in behavior. Besides, a meta-analysis of experimental studies assessing the effects of changing intentions on behavior (Webb & Sheeran, 2006) indicated that medium to large changes in intentions are only associated with small to-medium changes in behavior. Regarding arts appreciation, the *intention-behavior gap* is related to the fact that despite the general interest in and appreciation of culture (Eurobarometer, 2007), the actual behavior of visiting art museums and galleries is low in the population (Roose & Daenekindt, 2015; TNS Opinion and Social, 2013). Thus, according to the TPB, an *intention-behavior gap* in art appreciation could be due, to varying degrees, to beliefs and expectations/perceptions: of absent/reduced personal or social benefits for appreciating the arts; of no/low social value or expectation for appreciating the arts; and of personal or external barriers to appreciating the arts.

The TPB, in its original or adapted forms, has solid empirical support for explaining participation in various artistic or cultural settings, such as: cinema (Ajzen & Fishbein, 1969; Tefertiller, 2017); music (Ajzen & Fishbein, 1969; Tong et al., 2016); dance (Goulimaris, 2016; Goulimaris & Bebetsos, 2014; Scott et al, 2010); literature (Ajzen & Fishbein, 1969; Broeder & Stockmans, 2013; Miesen, 2003; Van Schooten & De Glopper, 2002); theatre (Ursin, 2016); video games (Koh et al. 2017); tattooing (Giovannetti & Raggiotto, 2017); design (Lu & Luh, 2013); and art exhibitions or museums that include art and other cultural items or in combination with other artistic settings (Pramanik et al., 2016; Ursin, 2016; Yamada & Fu, 2012).

1.6. Motives for Visiting Art Exhibitions

Besides factors of the intention to visit art exhibitions identified by the TPB, the specific motives based on this intention and the derived behavior should be considered. Several studies have focused on the motivations for visiting art museums and galleries, which may help to understand people's motivations for visiting art exhibitions, considering the fact that these mostly occur on those settings.

Some studies identified more "basic motives", related to the need to fulfil a duty or something worthwhile (Brida et al, 2013) or the desire to visit a place with popularity (Phelam et al., 2017), to experience the setting of the exhibition (Dragicevic et al., 2013), to occupy leisure time (Brida et al., 2013) or to be entertained (Dragicevic et al., 2013).

Other studies observed "emotional motives", associated to the possibility of enjoyment (Packer & Ballantyne, 2002), in particular the enjoyment of works of art (Hanquinet, 2013), the feeling of emotions, and, in particular, having fun (Hanquinet, 2013).

A number of studies found various "therapeutic motives", connected with the drive to refresh the mind (Pramanik et al., 2016), relax (Brida et al, 2013; Cotter et al., 2021; Packer & Ballantyne, 2002), overcome stress (Pramanik et al., 2016), rest (Brida et al., 2013) or restore oneself personally (Phelam et al., 2017).

Several studies found "cognitive motives" linked to the need to satisfy curiosity or a specific interest (Brida et al, 2013; Cotter, et al., 2021), to experience novelty (Dragicevic et al., 2013), to learn (Brida et al, 2013; Cotter, et al., 2021; Jansen-Verbeke & van Rekom, 1996; Phelam et al., 2017; Yamada & Fu, 2012), specifically learning in a fun and exploratory way through discovery (Packer, 2006) or discovering in an emotionally engaging way (Packer & Ballantyne, 2002), knowing (Hanquinet, 2013) or education (Dragicevic et al., 2013).

A few studies identified "personal development motives", such as achieving a broadening of the mind (Pramanik et al., 2016), inspiration (Cotter, et al., 2021; Hanquinet, 2013), personal life enrichment and quality (Jansen-Verbeke & van Rekom, 1996), self-fulfillment (Packer & Ballantyne, 2002), and self-realization (Dragicevic et al., 2013)

Finally, some studies spotted "social motives", related to the need for socialization or social interaction (Cotter, et al., 2021; Packer & Ballantyne, 2002; Phelam et al., 2017; Yamada & Fu, 2012), such as visiting exhibitions with friends or relatives (Reistätter & Chistidou, 2024; Hanquinet, 2013; Thyne, 2001), accompanying someone (Brida et al, 2013), eventually for educational reasons (Jurėnienė & Peseckienė, 2020) or meeting people (Hanquinet, 2013).

1.7. Study's Relevance and Objectives

As mentioned above, visiting art exhibitions has a significant value for individuals and societies but is a low frequency activity. Many cultural ministries, art visiting settings (like museums and galleries), may be failing to attract people to visit art exhibitions partly due to a lack of programs and marketing strategies based on a lack of understanding of the psychological dynamics beyond the behavior of visiting art exhibitions (Jansen-Verbeke van Rekom, 1996). Such an understanding is necessary for cultural ministries, art museums and galleries to develop compelling programs and marketing messages to engage people in visiting art exhibitions (Yamada & Fu, 2012).

Considering the consistent empirical support of the Theory of Planned Behavior (TPB) in explaining arts participation - together with the lack of studies on its empirical viability in explaining only the behavior of visiting art exhibitions - the main objective of the present study was to test the application of an adapted form of the TPB to that behavior. The study also aimed to investigate the levels of the variables considered by the TPB, possible differences due to gender and age, and motives for visiting art exhibitions.

2. Method

2.1. Participants

The sample consisted of 290 undergraduate psychology students, 82.5% female, and 14.8% male, aged between 18 and 54 years old, with the majority (87.6%) aged between 18 and 21 years old (M=20.63; SD=5.88). All participants gave informed consent, and the study was approved by an institutional deontological committee.

2.2. Instrument

The target dimensions regarding visiting art exhibitions (i.e., behavior, perceived behavioral control, subjective norm, attitude, intention, and motives) were measured using a specially developed questionnaire, titled *Art Exhibitions Visiting Questionnaire – AEVQ.* The questionnaire was partly constructed based on the recommendations for constructing a theory of planned behavior (TPB) questionnaire (Ajzen, 2006). More specifically, in the current study Behavior - B (one item, to function as the dependent variable) refers to the respondents' behavior of visiting art exhibitions, Perceived Behavioral Control - PBC (six items) refers to the perceived level of easiness/difficulty regarding this behavior, Subjective Norm – SN (six items) refers to the perceived level of others' approval/disapproval of this behavior by others, Attitude - A (six items) refers to the valorization/devaluation of this behavior, and Intention - I (six items) refers to the drive to perform this behavior. Other than the dimensions based on the TPB, a dimension regarding Motives - M (six items) was included, which refers to the motives for visiting art exhibitions. These last items were based on the results of studies on motives for visiting art exhibitions mentioned in the introduction.

Apart from two initial items measuring demographic variables (i.e., gender, and age) the AEVQ consisted of 31 items addressing the above-mentioned dimensions and using a five-point Likert scale, ranging from one to five, where one refers to the minimum and five to the maximum endpoints of the scale. The labels of these endpoints vary according to the items' content (e.g., disagree totally / agree totally). An additional 32nd item was an open-ended question on other personal motives for visiting art exhibitions, as this variable is not included in the TPB. 86 participants responded to this item: 86% female, and 14% male, aged between 18 and 48 years old, with the majority (82.55%) aged between 18 and 21 years old (M=21.21; SD=6.26).

Responses to the Likert scale items, except for the Behavior – BEH item, were subjected to an exploratory principal components analysis (PCA – 31 items). This analysis resulted in the merging of all the items of Attitude – A and Intention – I, along with three of the items of Motives – M in one factor. This led to the decision

to attempt a second exploratory PCA with a different pool of items, retaining the Intention – I items (due to its role as the sole mediator in the model of the forthcoming path analysis), and omitting all items of Attitude - A and the three problematic items of Motives - M. In this second PCA eight items loaded in more than one factor, leading to the decision of omitting them for a third exploratory factorial analysis, followed by a reliability analysis, which results are presented in the Results section.

2.3. Data Analysis

The third and final PCA of AEVQ's selected items, with *varimax rotation*, was carried out on a pool of 16 items corresponding to the following four dimensions: Perceived Behavioral Control – PBC, Subjective Norm – SN, Intention – I, and Motives - M. In order to create scales for this pool of items, homogeneity analyses of the resulting factors were performed using Cronbach's alpha coefficient. Metrological characteristics of the scales were carried out in terms of their mean(*M*) and standard deviation (*SD*). Correlations between the scales were analyzed, using Pearson's correlation coefficient (r).

A path analysis was performed using IBM SPSS AMOS 27.0. The structural analysis was conducted using the scales resulting from the PCA and homogeneity analyses, as well as the item of Behavior - B. The direct effects of independent variables on the dependent variable were tested as well as the indirect effects through a mediator variable. The structural model was evaluated as adequate considering the values of the following fit indexes: chi-square test, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Goodness-of-Fit Index (GFI) and Root Mean Square Error of Approximation (RMSEA).

An independent-samples t-test was run to determine possible differences in the scales based on gender (male, and female groups), and one-way ANOVA was conducted to determine possible differences based on the age (18, 19, 20, and 21-50 years old groups). These statistical analyses, together with the one concerning correlation, were performed using IBM SPSS Statistics 27.0.

Responses to the open-ended question about other personal motives for visiting art exhibitions were subject to thematic content analysis (82.76% agreement, in 34% of the answers).

3. Results

Regarding the PCA on the AEVQ, the overall Kaiser-Meyer-Olkin (KMO) measure was 0.85, thus meritorious (Kaiser, 1974). Bartlett's test of sphericity was statistically significant (χ^2 (120) = 2371.51, $p < 0.001$), indicating that the data was most probably factorizable.

PCA revealed four factors that had Eigenvalues >1, which explained 32.0%, 17.2%, 10.5% and 8.3% of the total variance, respectively. This four-factor solution met the interpretability criterion (Laerd, 2015) aligning with the four considered dimensions. As such, four factors were retained, which explained 68.1% of the total variance. A Varimax orthogonal rotation led to the identification of four factors with strong loadings of Intention - I items on Factor 1, Perceived Behavioral Control - PBC items on Factor 2, Subjective Norms - SN items on Factor 3 and Motives - M items on Factor 4. Component loadings of the rotated solution are presented in Table 1.

Table 1. Rotated Structure Matrix for PCA with Varimax Rotation

Items	Factor 1	Factor 2	Factor 3	Factor 4
24. I want to visit art exhibitions	.91			
20. I intend to visit art exhibitions	.90			
28. I expect that I will visit art exhibitions	.89			
8. I plan to visit art exhibitions	.86			
16. I will make plans to visit art exhibitions	.86			
21. The decision to visit art exhibitions is under my control		.86		
9. Whether or not I visit art exhibitions is completely up to me		.82		
13. I am confident that if I wanted to I could visit art exhibitions		.79		
25. Visiting art exhibitions is possible for me		.74		
26. People invite me to visit art exhibitions with them			.78	
10. Most persons that are important to me visit art exhibitions			.76	
14. It is expected of me that I visit art exhibitions			.69	
6. Most people who are important to me think that I should visit art exhibitions			.67	
32. I visit art exhibitions because it allows me to be in famous places				.88
31. I visit art exhibitions because it allows me to see the originals of works I know				.72
34. I visit art exhibitions because it allows me to communicate with other people				.60

Table created by the authors

As consultable in Table 2, all four factors presented an acceptable level of internal consistency, with a Cronbach's alpha between .65 and .94. The average variance explained values ranged from 0.54 to 0.77, suggesting that between 54% and 77% of the variance was explained by their respective factors. The composite reliability values ranged from .78 to .94 indicating high reliability.

Table 2. *Cronbach's Alpha, Average Variance Explained and Component Reliability*

Factors	Items (N)	Alpha	AVE	CR
1 (Intention –I)	5	.94	.77	.94
2 (Perceived Behavioural Control – PBC)	4	.81	.64	.87
3 (Subjective Norms - SN)	4	.74	.52	.81
4 (Motives - M)	3	.65	.54	.78

AVE = Average variance explained; CR = Composite reliability
Table created by the authors

The results of PCA and reliability analysis allow to consider each of the identified factors as a scale, namely: Intention - I (five items, α=.94; e.g., "I intend to visit art exhibitions"); Perceived Behavioral Control - PBC (four items, α= .81; e.g., "The decision to visit art exhibitions is under my control"); Subjective Norm - SN (4 items, α=.74; e.g., "It is expected of me that I visit art exhibitions"); Motives - M (3 items, α=.65; e.g., "I visit art exhibitions because it allows me to be in famous places").

The descriptive statistics of the above scales, and of the item of Behavior – B, which constitute this study's variables, follow in Table 3.

Table 3. Descriptive Statistics of Scales and of BEH item (variables)

Variables	Min.	Max.	Mean	Std. Deviation
Behaviour – B	1.00	5.00	2.35	1.02
Intention – I	1.00	5.00	3.96	0.96
Perceived Behavioural Control – PBC	1.75	5.00	4.03	0.75
Subjective Norms – SN	1.00	5.00	2.77	0.82
Motives – M	1.00	5.00	2.69	0.95

Table created by the authors

Considering the mean values of the variables in focus (table 3) and taking as a reference the middle point of the used Likert scale, the results indicate that Behavior – B of visiting art exhibitions is slightly under the middle point (M=2.35, SD=1.01), Intention - I and Perceived Behavioral Control - PBC are well above the middle point (M=3.96 and M=4.03; SD=0.96 and SD=0.75), while Subjective Norms – SN and Motives – M are just slightly above (M=2.77 and M=2.69; SD=0.82 and SD=0.95).

Regarding correlations between the scales (table 4), the results demonstrate an association: between Behavior - BEH and Intention – INT ($r(288) = 0.43$, $p < 0.001$), Perceived Behavioral Control - PBC ($r(288) = 0.11$, $p < 0.005$), Subjective Norms – SN ($r(288) = 0.64$, $p < 0.001$) and Motives – M ($r(288) = 0.34$, $p < 0.001$); between Intention – I and Subjective Norms – SN ($r(288) = 0.38$, $p < .001$), and Motives – M ($r(288) = 0.34$, $p < 0.001$); between Perceived Behavioral Control - PBC and Subjective Norms – SN ($r(288) = 0.13$, $p < 0.005$); and between Subjective Norms – SN and Motives – M ($r(288) = 0.34$, $p <0 .001$). As it can observed, the strongest association is between Behavior - BEH and Subjective Norms – SN.

Table 4. Pearson correlation between scales

	BEH	INT	PBC	SN
Intention – I	.43**	-		
Perceived Behavioural Control - PBC	.12*	-.02	-	
Subjective Norms – SN	.65**	.38**	.13*	-
Motives – M	.35**	.35**	.10	.34**

** = p < .001; * = p < .005
Table created by the authors

Taking into account the path analysis, a structural equation model (SEM) was developed with the aim to investigate the relationships between Behavior-BEH, Perceived Behavioral Control-PBC, Subjective Norms-SN, Intention-I and Motives-M. In the tested model, the direct effect of PBC, SN and M on Behavior-BEH was

tested along with the indirect effect via INT. The adapted pre planned behavior model demonstrated excellent fit to the data according to the fit indexes, χ^2 (110) = 228.810, p <.01, RMSEA = 0.06, CFI = 0.95, TLI = 0.94. The analysis of the standardized coefficients (fig. 1) demonstrated that PBC did not have a significant effect on BEH (β = -0.01, p =0.829) and had a small significant negative direct effect on mediator I (β = -0.13, p =0.027). SN had a strong positive impact o BEH (β = 0.68, p < 0.01) and a small but significant positive direct effect on I (β = 0.29, p < 0 .01), indicating that when SN increased by 1 unit, there is a corresponding increase of 0.29 in I. M did not had an impact on BEH (β = 0.07, p =0.298), but had a significant effect on I (β = 0.34, p < 0.01). I had a significant although weak positive effect on BEH (β = 0.12, p =0.039). Regarding the testing of indirect effects, the indirect effect of PBC on BEH through I was significant (β = -0.16, p= 0.034), providing evidence of full mediation, since the direct effect of PBC on B was not significant as presented above. The indirect effect of SN on BEH through I was significant (β = 0.34, p =0.029), only providing evidence of a partial mediation, since the direct effect of SN on BEH was also significant. Nevertheless, the impact became significantly stronger under the impact of the mediator. Last, the indirect effect of M on BEH through I was also significant (β = 0.39, p =0.034), providing evidence of full mediation, since the direct effect of M on BEH was not significant.

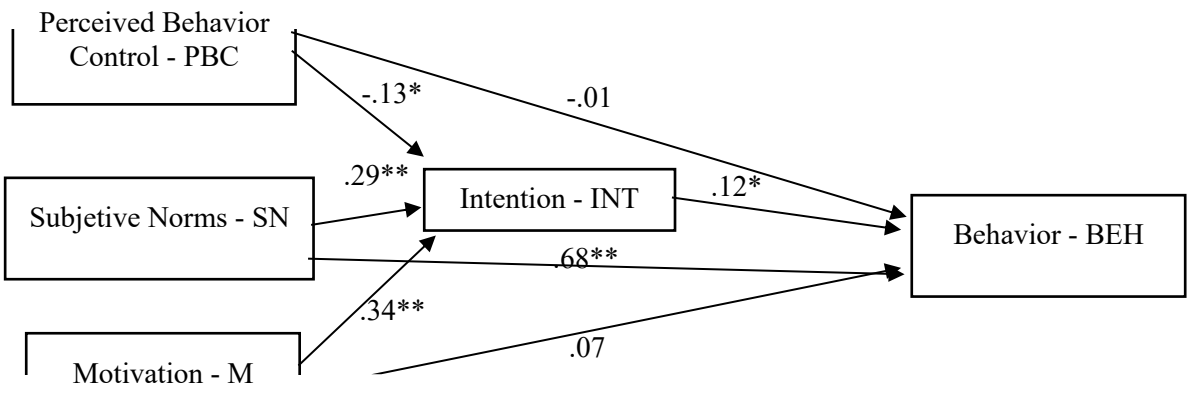

Figure 1. Structural Equation Model of the relationship between BEH, PBC, SN, MOT and INT. **= p < 0.001; *= p < 0.005 (figure created by the authors)

Taking into consideration differences in the scales based on gender, there was only one variable, Intention - I, for which participants significantly differed. Specifically, females (*M*=4.01, *SD*=0.95) demonstrated a significantly higher intention to visit art exhibitions than males (*M*=3.61, *SD*=0.89), t(288)=-2.567, p=0.01. Males' intention score to visit art exhibitions was -0.40 lower than females' score (95% CI [-0.71, -0.09]). Effect size (d=0.43) was of medium strength. Students didn't significantly vary their answers according to their age for any of the study's variables.

Finally, regarding student's motives to visit art exhibition, as measured through thematic content analysis (Table 5), the following motives were found: appreciation of art; experience of emotions; experience of pleasure; entertainment; evasion; personal development; learning; self-knowledge; getting inspired; interpersonal relationships; support of the arts.

Table 5. Motives to visit art exhibitions

Category	Meaning	Illustrative Answer
Appreciation	Appreciation of art	"To feed the thirst for art (...)"
Emotion	Experience of emotions	"It makes me feel emotions (...)"
Pleasure	Experience of pleasure	"I visit art exhibitions (...) [since] it is pleasurable."
Entertainment	Experience of entertainment	"(...) to unwind, to get out of the routine."
Evasion	Evasion of everyday life	"(...) [to evade] from the constraints of everyday reality (...)"
Development	Personal development	"[to] develop my own creativity."
Learning	Development of knowledge, culture or curiosity	"[for] the acquisition of knowledge and general culture."
Self-knowledge	Acquisition of self-knowledge	"Helps with introspection (...)"
Inspiration	Getting inspired	"[to get] artistic inspiration (...)"
Relationship	Interpersonal relationships	"[by] the company of friends"
Support	Support of the arts and artists	"[To] support artists monetarily and give attention to diverse artists (...)"

Table created by the authors

4. Discussion and conclusion

This study mainly aimed to test the application of an adapted form of the TPB to the behavior of visiting art exhibitions for a sample of university students, who answered a questionnaire (AEVQ). Furthermore, it aimed to explore the levels of the variables considered by the TPB, potential differences due to gender and age, and motives for visiting art exhibitions.

Concerning the identified variables of the AEVQ, the observation was replicated, regarding the behavior of visiting art exhibitions, involving four of the five variables considered by the TPB – i.e., Behavior, Intention, Perceived Behavioral Control, and Subjective Norms Additionally, a new variable was identified (i.e., Motivation) that was not originally considered by the TPB. All of these scales show high internal consistency, with the exception of Motivation, which nevertheless is not very low. Besides, it was not possible to isolate a variable considered by the TPB, namely Attitude, but this might be considered as involved in Motivation.

Regarding the mean values of the variables measured by the AEVQ (Table 3), the results seem to suggest that although most students report an intention to visit art exhibitions and find it possible and under their control to do so, they actually do not implement this much. Results also seem to suggest that students might be less decided concerning the social value of visiting art exhibitions and regarding the strength of the evaluated motives for those visits. These results can be interpreted as revealing a gap between the intention to visit art exhibitions and the corresponding behavior of actual visiting them. This confirms and seems to instantiate, for the case of art exhibitions and university students, the known general *intention-behavior gap* (Sheeram, 2002). Results also confirm, for the studied context, the general tendency for low art participation levels (TNS Opinion and Social, 2013), although not so significantly the fact that the general population reveals a valorization of culture (Eurobarometer, 2007).

Concerning the path analysis results, these are partly consistent with the expectations of the TPB (Ajzen, 1991; Fishbein & Ajzen, 2010). In line with the TPB, is the observation that the assessed behavior of visiting art exhibitions is significantly predicted by the intention to do so, which in turn is positively and significantly influenced by the perception of its social value and the expectation to do so (subjective norms). Considering, as previously mentioned, that the measured motives to visit art exhibitions might be counted as involving attitude, the result that those motives influence positively and significantly intention is also in the direction of the TPB. Also, in line with results of studies under the framework of the TPB (Armitage & Conner, 2001) is the fact that although the intention to visit art exhibitions predicts behavior, such effect is low, confirming the existence of the known *intention-behavior gap* also here. Not confirming the TPB, and difficult to explain, is the observation that perceived behavior control negatively and significantly influences intention to visit art exhibitions.

Considering the results of differences in the measured variables based on gender, the fact that there are significant differences between men and women regarding intention to visit art exhibitions aligns with other studies, that have observed gender differences concerning artistic participation (e.g., Szostak, 2022).

Concerning the motives for visiting art exhibitions detected by thematic analysis (Table 5), results mostly replicate or are near motives found by previous research, (see Introduction subsection *Motives for Visiting Art Exhibitions*), thus consolidating it. “Appreciation”, “emotion” and “pleasure” resemble the previously spotted “emotional motives” (e.g., Hanquinet, 2013). “Entertainment” replicates a motive observed by Dragicevic et al. (2013). “Evasion” might fall in the group of the previously identified “therapeutic motives” (e.g., Cotter et al., 2021). “Development” and “self-knowledge” seem to fit the group of the formerly detected “personal development motives” (e.g., Pramanik et al., 2016). Both “learning” “inspiration”, and “relationship” replicate previously observed motives (e.g., Cotter et al., 2021). Finally, “support” addresses a motive not mentioned in the consulted literature, which might reflect an awareness of the value of the arts, and of the typical artists’ condition of professional precarity, known by research on the topic (Duarte, 2020).

Nevertheless, it should be taken into account the main limitations of the present study, related to the use of a relatively small sample of university students, the focus on art exhibitions in general, not considering their specificities regarding context (e.g., galleries, museums, biennales, etc.) and type of art (e.g., ancient, modern, contemporary), and the impossibility of considering the variable attitude in the performed path analysis. Studies on the application of the TPB to the behavior of visiting art exhibitions that cover these limitations are therefore needed in the future.

Reflecting on the practical implications of the results, they suggest the need to reduce the intention-behavior gap in visiting art exhibitions. Besides, results suggest that for this it might contribute to develop: beliefs and expectations/perceptions of personal or social gains for such visiting (e.g., learning, relaxing, socializing); a social valorization and expectation to visit (e.g., the social value of appreciating the arts); and personal and external facilitators for visiting (e.g., opportunities of free entrance; ability to enjoy). Such development is in reach of a variety of procedures, like marketing, artistic education and cultural politics, aimed at increasing the population’s behavior of visiting art exhibitions, taking into account the potential of this behavior for well-being and personal and social development.

References

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.) Action-control: From cognition to behavior (pp. 11-39). Springer.

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I. (2006). Constructing a theory of planned behavior questionnaire. https://www.researchgate.net/publication/235913732_Constructing_a_Theory_of_Planned_Behavior_Questionnaire

Ajzen, I. & Fishbein, M. (1969). The prediction of behavioral intentions in a choice situation. Journal of Experimental Social Psychology, 5(4), 400 - 416. https://doi.org/10.1016/0022-1031(69)90033-X

Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* Prentice Hall.

Ajzen, I. & Madden, T. J. (1986). Predictions of goal-directed behavior: Attitudes, intentions and perceived behavioral control. *Journal of Experimental Social Psychology*, 22, 453–457. https://doi.org/10.1016/0022-1031(86)90045-4

Armitage C. J. & Conner M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology,* 40, 471-499. https://doi.org/10.1348/014466601164939

Bandura A. (1997). Self-Efficacy: The exercise of control. Freeman.

Barry, G., Cotter, K. N. & Pawelski, J. O. (2024). The ability of art museums to enhance human flourishing. In B. Redmond-Jones (Ed.). Welcoming museum visitors with unapparent disabilities (pp. 151 - 162). Rowman & Littlefield.

Brida, J. G., Disegna, M. & Vachkova, T. (2013). Visitor satisfaction at the museum: Italian versus foreign visitors. Tourism: An International Interdisciplinary Journal ,61(2),167-186. https://hrcak.srce.hr/106866

Broeder, P. & Stokmans, M. (2013). Why should I read? - A cross-cultural investigation into adolescents'reading socialisation and reading attitude. International Review of Education, 59(1), 87-112. https://doi.org/10.1007/s11159-013-9354-4

Brown, A. S. (2004). The values study: Rediscovering the meaning and value of arts participation. Connecticut Commission on Culture and Tourism.

Chin, T. & Phillips, M. (2004). Social reproduction and child-rearing practices: Social class, children's agency, and the summer activity gap. Sociology of Education, 77(3), 185-210. https://doi.org/10.1177/003804070407700301

Cotter, K. N., Fekete, A. & Silvia, P. J. (2021). Why do people visit art museums? Examining visitor motivations and visit outcomes. Empirical Studies of the Arts, 40, 275 - 295. https://doi.org/10.1177/0276237421101174

Cotter, K. N. & Pawelski, J. O. (2021). Art museums as institutions for human flourishing. The Journal of Positive Psychology, 17(2), 288–302. https://doi.org/10.1080/17439760.2021.2016911

DiMaggio, P. (1982). Cultural capital and school success. The impact of status culture participation in the grades of U.S. high school students. *American Sociological Review, 47*, 189-201. https://doi.org/10.2307/2094962

Dragicevic, M., Letunic, S. & Pisarovic, A. (2013). Tourists' experiences and expectations towards museums and art galleries- empirical research carried out in Dubrovnik. In Raguz, I. V., Roushdy, M., & Salem, A-B. M. (Eds.) *Recent Advances in Business Management and Marketing* (pp. 225-232). WSEAS Press

Duarte, A. M. (2020). Artists' precarity in the context of their social integration. In T. Rachwał, R. Hepp & D. Kergel (Eds.). *Precarious places: Social, cultural and economic aspects of uncertainty and anxiety in everyday life* (pp. 19-39). Springer.

Eurobarometer (2007). *European cultural values.* Special Eurobarometer. Research Report No. 278. European Comission. https://www.egmus.eu/fileadmin/statistics/themes/Management/994_Special_Eurobarometer_278.pdf

Falk, J. H. & Dierking, L. D. (1992). *The museum experience*. Whalesback Books.

Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison Wesley.

Fishbein M. & Ajzen I. (2010). *Predicting and Changing Behavior: The Reasoned Action Approach.* Psychology Press.

Giovannetti, M. (2017). *Effects of materialism on tattoo consumption*. Lambert Academic Publishing

Goulimaris, D. (2016). Examination of the relation between the planned behavior theory and the attitudinal loyalty to recreational dance activities. *Journal of Physical Education and Sport, 16*(1), pp.656 – 663. https://efsupit.ro/images/stories/nr1.2016/Art%20105.pdf

Goulimaris, D. & Bebetsos, E. (2016). Investigation of students' intention for possible participation in a "music and dance" distance education master program. *GLOKALde, 1*(1), article 8. https://www.glokalde.com/Articles/8/investigation-of-students-intention-for-possible-participation

Hanquinet, L. (2013). Mondrian as kitchen tiles? Artistic and cultural conceptions of art museum visitors in Belgium, *Cultural Trends, 22*(1), 14-29. https://doi.org/10.1080/09548963.2013.757892

Jansen-Verbeke, M. & van Rekom, J. (1996). Scanning museum visitors: Urban tourism marketing. *Annals of Tourism Research*, *23*(2), 364–375. https://doi.org/10.1016/0160-7383(95)00076-3

Jurėnienė, V. & Peseckienė, D. (2020). Art gallery visitors' motivations. *Information & Media*, *89*, 17-33.

Koh, H. E., Oh, J. & Mackert, M. (2017). Predictors of playing augmented reality mobile games while walking based on the theory of planned behavior: Web-based survey. *JMIR Mhealth Uhealth, 5*(12), e191. https://mhealth.jmir.org/2017/12/e191/

Kotler, N. G., Kotler, P. & Kotler, W. I. (2008). *Museum marketing & strategy* (2nd ed.). Jossey-Bass. Lu, C-C., & Luh, D-B. (2013). Innovative behavioral intention and creativity achievement in design: test of an integrated model. In A. Marcus (Ed.) *Design, User experience, and usability. Design philosophy, methods, and tools*. Second International Conference, DUXU 2013. Part 1 (pp. 535 – 544). Springer. https://doi.org/10.1007/978-3-642-39229-0_57

Reitstätter, L. & Christidou, D. (2024). Alone together? Solitary and shared visiting practices of pairs in the art museum. *Museum Management and Curatorship*, *39*(6), 789-809. : https://doi.org/10.1080/09647775.2024.2312579

McCarthy, K. F., Ondaatje, E. H. & Zakaras, L. (2001). *Guide to the literature on participation in the arts.* Report. RAND Corporation. http://www.rand.org/pubs/drafts/DRU2308.html

Miesen, H. W. (2003). Predicting and explaining literary reading: an application of the theory of planned behavior, *Poetics, 31*(3–4), 189-212. https://doi.org/10.1016/S0304-422X(03)00030-5

Packer, J. (2006). Learning for fun: The unique contribution of educational leisure experiences. *Curator*, *49*(3), 329–344. https://doi.org/10.1111/j.2151-6952.2006.tb00227.x

Packer, J. & Ballantyne, R. (2002). Motivational factors and the visitor experience: A comparison of three sites. *Curator*, *45*(3), 183–198. https://doi.org/10.1111/j.2151-6952.2002.tb00055.x

Phelan, S., Bauer, J. & Lewalter, D. (2018). Visit motivations: Development of a short scale for comparison across sites*, Museum Management and Curatorship,* 33, 25–41. https://doi.org/10.1080/09647775.2017.1389617

Pramanik, S. A., Hossain, E. & Azam, S. (2016). The impacts of visitors attitude on visit intention in the context of museum applying SEM: Offering an alternative visit intention model, *Bangladesh Journal of Tourism, 1*(1), 1-14. https://ssrn.com/abstract=2944131

Rogers R. W. (1983). Cognitive and physiological processes in fear appeals and attitude change: A revised theory of protection motivation. In J. T. Cacioppo, & R. E. Petty (Eds.) *Social Psychophysiology: A Source Book (*153–176). Guilford Press.

Roose, H. & Daenekindt, S. (2015). Trends in cultural participation. In J. D. Wright (Ed.), *The international Encyclopedia of the Social and Behavioral Sciences* (2nd ed.; pp. 447-452.) Elsevier.

Scott, E. J., Eves, F. F., Hoppé, R. & French, D. P. (2010). Dancing to a different tune: The predictive utility of the theory of planned behaviour when the behaviour is constrained, *Psychology of Sport and Exercise, 11*(3), 250-257. https://doi.org/10.1016/j.psychsport.2009.09.007

Sheeran P. (2002). Intention-behavior relations: a conceptual and empirical review. *European Review of Social Psychology,* 12, 1–30. https://doi.org/10.1080/14792772143000003

Sheeran, P. & Webb, T. L. (2016). The intention–behavior gap. *Social and Personality Psychology Compass, 10*(9), 503–518. https://doi.org/10.1111/spc3.12265

Szostak, M. (2022). Gender differences regarding participation form in the arts receiving process. Consequences for aesthetic situation management. *International Journal of Contemporary Management, 59*, 26 - 56. https://sciendo.com/article/10.2478/ijcm-2022-0010

Tefertiller, A. (2017). Moviegoing in the Netflix age: Gratifications, planned behavior, and theatrical attendance. *Communication & Society 30*(4), 27-44. https://dadun.unav.edu/handle/10171/54608

Tepper, S. J. & Gao, Y. (2008). Engaging art. What counts? In S. J. Tepper & B. Ivey (Eds.), *The next great transformation of America´s cultural life* (pp. 17-47). Routledge.

Thyne, M. (2001). The importance of values research for nonprofit organisations: The motivation-based values of museum visitors. *International Journal of Nonprofit and Voluntary Sector Marketing*, *6*(2), 116–130. https://doi.org/10.1002/nvsm.140

Tinio, P. L. (2013). From artistic creation to aesthetic reception: The mirror model of art. *Psychology of Aesthetics, Creativity, and the Arts*, *7*(3), 265–275. https://doi.org/10.1037/a0030872

Tong, E., White, C. J. & Fry, T. (2016). Classical music concert attendance and older adults: A goal directed approach. *Journal of Leisure Research, 48*(2), 178–187. https://doi.org/10.18666/jlr2016-v48-i2-6437

Trafimow, D. & Finlay, K. A. (1996). The Importance of Subjective Norms for a Minority of People: between Subjects and within-Subjects Analyses. *Personality and Social Psychology Bulletin*, *22*(8), 820–828. https://doi.org/10.1177/0146167296228005

Triandis, H. C. (1980). Values, attitudes, and interpersonal behavior. In H. Howe & M. Page (Eds), *Nebraska Symposium on Motivation* (Vol. 27, pp. 195-259). University of Nebraska Press.

Ursin, P-K. (2016). Explaining cultural participation. Applying the theory of planned behavior to German and Finnish primary school children. PhD Tesis. University of Turku. https://www.utupub.fi/bitstream/handle/10024/125715/AnnalesB423afUrsin.pdf

Van Schooten, E. & De Glopper, K. (2002). The relation between attitude toward reading adolescent literature and literary reading behavior. *Poetics*, 30, 169–194. https://doi.org/10.1016/S0304422X(02)00010-4

Webb T. L. & Sheeran P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological. Bulletin,* 132(2), 249–268. https://doi.org/10.1037/0033-2909.132.2.249

Yamada, N. & Fu, Y-Y. (2012). Using the theory of planned behavior to identify beliefs underlying visiting the Indiana State Museum, *Journal of Travel & Tourism Marketing, 29*(2), 119-132. https://doi.org/10.1080/10548408.2012.648503