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Abstract

This paper focuses on initiatives of the Egyptian Exchange (EGX) to increase financial awareness among Egyptian citizens about investing in the stock market. Typically, EGX uses different types of videos as part of its financial literacy initiatives. We examine the impact of four types of video advertising (TV, Animation, Educational, and Storytelling) on increasing the intention of individuals to participate (investment intention) in the EGX. Using a survey of 329 Egyptian respondents, we find that storytelling advertising content format could enhance the investment intention. Moreover, investment intention is significantly affected by perceived knowledge and memory efficiency. The findings have policy implications that could be considered to improve stock market participation.

Keywords: Stock Market Participation; Financial Awareness; social media; TV; Theory of Planned Behavior.

1. Introduction

Households who have high and stable incomes and are well-educated are more likely to invest in the stock market (Xia, et al., 2014). Stock market participation (SMP, thereafter) of households has a vital impact on market development and the economy. Moreover, SMP differs not only among individuals in one country but also across countries. Thus, it becomes an important and interesting topic of research. SMP as personal economic activity can be affected by such factors as demographic characteristics, economic conditions, political stability, regulations, etc. In recent years, many studies have found that increasing financial awareness among individuals will increase the intention to participate in the stock market (Lu, et al., 2024; Gusio and Jappelli, 2005). The Egyptian Exchange (EGX) suffers from limited participation of individuals in the stock market (Otaify, 2016). To mitigate the negative impact on trading as well as to attract new investors to participate in the stock market, EGX conducts several initiatives to increase financial awareness

about investing in EGX such as providing training courses for university students, developing a trading simulator as a game (called, stock riders), publishing educational brochures, using different types of video advertising about investing in EGX and are available on its official YouTube channel. This paper aims to analyze the effectiveness of the four types of video advertising on the intention of individuals to participate in the EGX.

Advertising as a form of promotion has garnered significant scholarly attention due to its widespread reach. Some companies employ advertising to elicit immediate consumer responses or actions while others prioritize long-term strategies focused on building awareness and cultivating a favorable intention (Lutfie, and Marcelino 2020). Video advertising is one of the most effective tools in marketing, so business firms and governments use TV advertising to increase the population's awareness about products/services or different social issues in the country. Moreover, the video is used also as an educational tool that helps educators and trainees simply get information & knowledge. Television channels present economic talkshow programs to address contemporary economic and financial issues which indirectly improve the financial awareness of TV viewers. Moreover, TV video advertising could cost-effectively deliver basic financial knowledge, especially for viewers in remote areas (Crawford, et al ., 2018). Various models were created to measure the effectiveness of advertising, e.g., Lutfie and Marcelino (2020) argue that the EPIC model quantifies the performance of advertising with a communication approach developed by AC Nielsen, one of the world's leading marketing research companies. The EPIC model measures the performance of advertising that impacts communication. Technically, this model has four critical dimensions that have different levels of importance depending on marketing objectives. All four dimensions (dimensions, namely empathy, persuasion, impact, and communication) will be processed to obtain an EPIC level that will indicate whether the ad is effective or not.

This paper contributes to the literature by examining the impact of diverse advertising content on investment intent within the Egyptian Exchange (EGX). By filling a notable research gap, particularly in the Egyptian context, this investigation contributes to a deeper understanding of how advertising can influence investment intention. While literature has explored advertising's role in various marketing domains, its application to the stock exchange remains relatively understudied. This research endeavors to rectify this imbalance by focusing specifically on the investment context. This paper is extended into five sections: section 2 reviews most related literature. Section 3 describes the data and used methodology while sections 4 and 5 present the results and discussion. In section 6, we present the conclusion.

2. Literature Review and Hypothesis Development

2.1. *Stock Market Investment Intention and participation Related Literature*

Many studies have examined the impact of financial literacy on stock market performance. Guiso and Jappelli (2005) use a survey of Italian household portfolios to examine the impact of asset awareness and SMP. They argue that awareness of financial assets improves through two channels; information dissemination by asset issuers and social learning. They figured out that improved awareness of risky assets would double the current level of SMP. However, they find that both awareness and the participation in stock market change according to demographic characteristics such as education, wealth, and income (Guiso & Jappelli, 2005). Rooij, Lusardi, & Alessie (2011) discover that the majority of respondents have a basic level of financial knowledge. However, they find that financial literacy is positively related to the intention to invest in the stock market. Using data from a Chinese Consumer finance survey, Xia, Wang, and Li (2014) find that financial literacy overconfidence has a positive impact while under-confidence has a negative impact on SMP. Mishra (2018) applies logistic regression to survey data of Indian households to analyze their investment decisions in stock markets. Mishra finds that SMP is affected by risk tolerance, financial literacy, and investment awareness and it differs according to the demographic's characteristics. Thomas and Spataro (2018) find that financial literacy positively and significantly affects the SMP in European countries. They argue that this relationship differs across countries due to the differences in the education systems as well as the attractiveness of stock markets in addition to the socio-demographic variables. Bucher-Koenen, Alessie, Lusardi, & Rooij (2021) find that SMP is explained by the financial knowledge and confidence levels of individuals. Nyakurukwa and Seetharam (2024) find a significant impact of financial literacy on the intention to participate in the stock market but they find an insignificant impact on most proxies of social interactions. By controlling the demographic characteristics, they find that coloured and Asian individuals are more likely to invest in the stock market. Lu, et al., (2024) find that higher access to online wealth management products increases the participation of Chinese households in the stock market. However, they explore that higher educated, higher income stability households are major purchasers of online investment products. Yang et al. (2021) find that the stock market investment intention of Malaysian adults is affected positively by risk tolerance, herding behavior, and social interaction. They do not only find a significant impact of investment intention on SMP but they also find that investment intention has a mediate impact on the relationship between risk tolerance and overconfidence bias and SMP. Sabiran et al. (2023) find that intention to invest in the Malaysian stock market is significantly affected by behavioral factors and financial literacy.

The second group of literature focuses on the effectiveness of different tools in improving financial literacy. Crawford et al., (2018) found that using comedy TV videos increased the interest of the viewers to learn more about and open savings accounts, particularly in remote areas. Montazeri and Jozdani, (2018) find that TV advertising is the most effective tool, followed by the social network advertising used by investment companies to decrease investors' worries about investing

in the Tehran stock exchange. Kurniawan and Damayani (2022) examine the effectiveness of financial content on YouTube videos on financial literacy, behavior, and decisions of viewers in Indonesia. They find that financial decision is positively affected by financial literacy and financial behavior. Ravshanbekovna (2023) examine the financial education programs on television in developed countries and find these programs improved significantly the financial literacy of TV viewers and could affect their financial decisions and plans accordingly. Few studies have attempted to examine the SMP in Egypt. In this regard, Mosalamy and Metawie (2018) apply the theory of planned behavior to examine the effects of such factors as financial literacy, risk, and confidence on the decision of consumers to invest in the Egyptian stock market. They document a positive impact of investment intention on SMP.

As shown in literature review, most studies in the first group investigate determinants of SMP or investment intention while most of studies in the second group examine the impact of advertising on financial literacy. So, few studies have examined the effectiveness of using advertising on intention to invest in the stock market. In turn, the current study aims at covering this gap in literature.

2.2. *Effectiveness of advertising and intention to invest*

Advertising constitutes a strategic communication effort designed to influence consumer behavior and shape perceptions of products or services (Lin, 2011; Schiffman and Kanuk, 2007). Central to this process is the formation and modification of consumer attitudes. Lin (2011) conceptualizes attitude as a learned predisposition towards an object, encompassing affective, cognitive, and conative components. This construct aligns with Schiffman and Kanuk's (2007) definition of attitude as a learned evaluation of an object. Within the advertising context, Lin (2008) introduces the concept of advertising attitude as a learned orientation towards an advertisement itself. This orientation, characterized by positive or negative evaluations, significantly impacts consumer responses. Purchase intention, defined as the predisposition to buy a product or service (Hsu. and Tsou, 2011), is influenced by a complex interplay of factors including personal experience, preferences, and external stimuli such as advertising (Yang and Smith, 2009). Advertising can catalyze product recognition and purchase decisions across various product categories (Rossiter et al, 2000) Moreover, purchase intention, defined as the likelihood of engaging in a purchase behavior (Lin, 2011) is directly influenced by both advertising performance and consumer attitudes. Positive attitudes towards an advertisement are hypothesized to enhance investment intentions. This study proposes the following hypotheses:

H1: Advertising effectiveness (including TV, storytelling, animation, and educational content) positively affects Intention to invest.

2.3. Memory efficiency and Intention to invest

Memory, often operationalized through retrieval success, is a critical determinant of advertising effectiveness (Vinkovska, et al., 2019). While attention is paramount in initial processing, successful memory encoding influences consumer attitudes and purchase intentions. Research has consistently demonstrated that ad recall is positively correlated with favorable consumer outcomes. However, the memorability of advertising claims can be significantly impacted by exposure to competing brands. Previous studies have explored how familiarity with a brand influences the susceptibility of its advertising claims to memory interference. (Keller, 1991) posits that established brands benefit from stronger brand schemata, which enhance memory retention and resist competitive interference. This phenomenon may explain the enduring popularity of familiar brands, such as those in the stock market, and the challenges faced by new entrants in highly competitive markets (Hall, 1992). To address these issues, this study examines the impact of memory interference from EGX advertisements on investor attitudes and investment intentions. The following hypothesis is proposed:

H2: Memory efficiency from EGX advertisements positively influences Intention to invest.

2.4. Perceived knowledge and Intention to invest

Consumers often perceive advertising as a reliable source of product information. Research consistently supports the notion that advertising is a primary source of knowledge for consumers making purchase decisions (Sohet al., 2009). While consumers may primarily use advertising to learn about specific products or the consumption habits of reference groups (Pollay and Mittal, 1993), the perceived usefulness of advertising as a knowledge source can influence consumer attitudes and behaviors. Consumer knowledge evolves throughout the decision-making process, progressing from rudimentary to a sophisticated understanding of advertising cues. This "perceived knowledge" empowers consumers to critically assess products, potentially reducing the efficacy of advertising (Segijn and Van Ooijen, 2022). While prior research has explored consumer understanding of general advertising practices (Smith, et al., 2014; McDonald and Cranor, 2010), the specific domain of financial advertising remains understudied. These earlier studies found varying levels of consumer knowledge, with strengths in recognizing advertising's role in content delivery but weaknesses in comprehending product intricacies and regulatory frameworks. Perceived knowledge is hypothesized to be a significant predictor of consumer behavior. Building on the Theory of Planned Behavior (TPB), this research examines the influence of perceived knowledge on investor attitudes and intentions. Specifically, the following hypothesis is proposed:

H3: Perceived knowledge from EGX advertisements positively influences Intention to invest.

2.5. *Mediation Effect of Investment Attitude*

Attitudes serve as a psychological bridge between advertising effectiveness and intentions to invest, the core argument is that advertising effectiveness influences consumers' attitudes, which in turn influences their purchase intentions. Attitudes are formed as a result of exposure to the advertisement. Positive attitudes toward the ad, brand, or product increase the likelihood of purchase intention. Furthermore, Attitude is a fundamental concept in psychology, with significant applications in the social sciences and marketing. Lin (2011) shows that attitude is an enduring evaluation that encompasses an individual's feelings of like or dislike, emotional responses, and intentions to act regarding an object or idea. Schiffman and Kanuk (2007) noted that attitudes represent a psychological tendency developed through learning, reflecting an ongoing assessment of a subject. Lin (2011) defined advertising attitude as a reactive orientation that is learned about a particular object, embodying personal standards of preference and moral judgment. Consumer attitudes are shaped by advertising, which corresponds to thinking and feeling (Lin, 2011). Belch and Belch (1998) assert that advertising is designed to capture consumer attention, aiming to influence their attitudes and emotions regarding a product or service. This appeal has the potential to alter consumer attitudes. Ray and Batra (1983) emphasized that emotional identification (i.e. attitudes) precedes rational identification (Intention or behavior) thereby capturing consumers' attention more effectively and resulting in a more favorable advertising attitude. Accordingly, the initial hypothesis for this study is formulated as follows

H4: Advertising effectiveness (including TV, storytelling, animation, and educational content) positively influences Investment attitude.

In terms of memory, information is stored in either verbal or nonverbal/pictorial formats. When an individual is exposed to a visual stimulus, such as an image or video, an imaginal code is triggered, while a verbal code is activated in response to auditory stimuli like spoken words. Videos, in particular, engage both the verbal and visual cognitive systems of individuals (Kim and Lennon, 2008). Advertising plays a crucial role in enhancing memory through product placements, as noted by Ho et al. (2011). It captures attention, stimulates interest, and improves consumer memory and recall. Furthermore, advertising can alter consumer attitudes and overall evaluations of products, influence purchase intentions, and foster positive perceptions of products, thereby enhancing consumer attitudes (Freygang, 2013; Shavitt et al., 2004). However, as highlighted by van Reijmersdal et al., (2009) and Williams et al. (2011), a significant portion of the dynamics between memory efficiency and recall remains unexplored. Memory efficiency, although often overlooked in advertising research, is a vital aspect of assessing the effectiveness of marketing communications and consumer behavior. Recent scholarly discussions have called for more in-depth investigations into memory efficiency and its various types (Gross, 2010). Many academic studies regard memories as a reliable indicator of increased product awareness. The evolution of memory efficiency has influenced individuals' attitudes, thereby affecting their investment

intentions (Yim et al., 2021; Freygang,2013). Accordingly, the initial hypothesis for this study is formulated as follows:

H5: Memory efficiency from EGX advertisements Positively influences Investment attitude.

Perceived knowledge (PK) significantly influences attitudes, as noted by Schreiber et al., (2006) The role of perceived knowledge in shaping consumer attitudes and purchase intentions remains an area for further exploration. Typically analyzed through Structural Equation Modelling (SEM), perceived knowledge is integral to the formation of attitudes and the determination of purchase intent. Additionally, individuals who utilize various media platforms, including the Internet and mass communication, to acquire product information indicate a connection between their attitudes, behaviors, and intentions, as highlighted by Chae and Quick (2015). The Theory of Planned Behavior (TPB) provides a framework for understanding an individual's intention to engage in specific behaviors, with attitude being a fundamental factor influencing these intentions (Hoque et al.,2018). Magistris and Gracia (2008) assert that enhancing knowledge is vital for promoting product consumption, as product knowledge significantly shapes consumer attitudes, which in turn influences purchasing decisions. Padel and Foster (2005) corroborate this by stating that product knowledge positively affects consumer perceptions and attitudes. Furthermore, research indicates that increased knowledge not only enhances attitudes and the likelihood of purchasing products but also boosts consumption among current consumers (Teng and Wang, 2015; Gracia and Magistris, 2008). Demeritt (2002) pointed out that a lack of knowledge and awareness regarding products and services poses significant obstacles to purchasing decisions. A lower level of perceived knowledge correlates with greater uncertainty in product or service selection. Moreover, a more positive attitude towards a behavior correlates with a stronger intention to engage in that behavior. Consequently, the following hypothesis is proposed.

H6: Perceived knowledge from EGX advertisements positively influences Investment attitude.

Spears and Singh (2004) define purchase intention as an individual's desire to acquire a specific brand. The theory of planned behavior posits that one can predict whether a person intends to engage in a particular action by evaluating their attitudes toward that action (Spears and Singh, 2004). These attitudes and perceptions provide insight into individual intentions, as there exists a strong correlation between attitudes and behavioral intentions. According to Ajzen and Fishbein (2000), attitudes are based on beliefs stored in memory, which influence consumer behavior and are also shaped by contextual factors. Attitudes precede intentions, particularly about how individuals have previously assessed potential behaviors in shopping contexts. Individuals' attitudes toward an object represent a comprehensive evaluation influenced by their responses to stimuli or beliefs associated with that object, playing a crucial role in relational exchanges through cognitive, affective, and behavioral intentions. While attitudes are not subject to frequent fluctuations, they tend to be stable and enduring, serving as significant predictors of consumer behavior. A consumer who holds a favorable disposition toward an object is more likely to exhibit

a strong intention to purchase (Mostafa Hamdy,2023; Hmoud et al., 2022; Foroudi et al., 2018; Kudeshia & Kumar, 2017). Purchase intentions are linked to future planned behaviors and the propensity to translate existing beliefs and attitudes regarding a product into actual actions (Imtiaz et al., 2021; Kudeshia and Kumar, 2017). Investment intentions are connected to future planned actions and the inclination to convert beliefs and attitudes held about an investment into actions.

H7: Investment attitude positively influences Intention to invest.

2.6. Research Framework

A comprehensive literature review underpinned the identification of potential variables, which were subsequently integrated into a conceptual framework (Figure 1). This model elucidates the research's focal point: examining the influence of specific factors on investment intentions in the Egyptian Exchange (EGX). The study delves into the significance of EGX's internal marketing tools, particularly on video content. Independent variables were operationalized as the dimensions of EPIC (empathy, persuasion. Impact, communication), perceived knowledge, and memory efficiency.

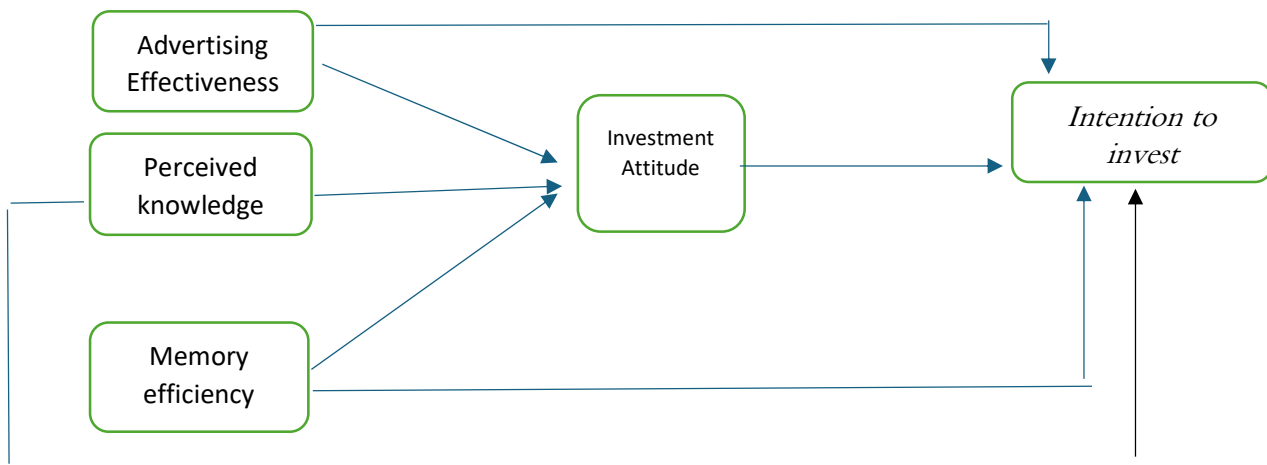


Figure 1: Research conceptual framework

3. Research Model

3.1. Variable Definition and Measurement

3.1.1. Types of Video Advertising

The EGX established its official YouTube channel in 2012, and it currently has 5.7K subscribers. EGX publishes many types of videos on its official YouTube channel where we select the four types of awareness videos: namely TV videos, educational videos by EGX executive directors, animation videos, and storytelling videos. Table 1 presents the main statistics of each type of video where TV videos are the shortest ones, but they have the largest average number of viewers. Accordingly, we choose the most viewed video of each type. The four videos are assigned to each

respondent to examine how each type of video could affect an investor's attitude, perception, and intention to participate in the EGX.

Table 1: Main Statistics of EGX Videos on EGX's YouTube Channel

Video Type	No. videos	Average Time Length (Minutes)	Average No of Views
TV content Videos	5	0:50	602,000
Educational content Videos	11	3	1033
Animation content Videos	5	1	39,420
Storytelling content Videos	13	1:50	446

Source: Prepared by authors based on data available on EGX's YouTube Channel

3.1. Measures of Constructs

Data is acquired through an online survey disseminated to university students and staff, as well as online community members, primarily residing in Alexandria and Cairo targeting individuals in such territory. Of the 379 distributed questionnaires, 329 were deemed usable for analysis after excluding those with incomplete responses. The survey comprised two sections: demographic information and factors influencing investment intention. Table 2 presents the measures of constructs used in the study.

3.2. Data analysis

The current study focused on Structural Equation Modeling (SEM), a multivariate statistical technique employed to examine complex relationships among multiple variables. It comprises two interconnected models: the measurement model and the structural model. The former evaluates the validity and reliability of latent constructs through indicators, while the latter assesses the hypothesized relationships between these constructs (Hair, et al., 2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) is a variant of SEM that maximizes covariance between latent variables. It utilizes least squares estimation for both single and multiple-component models (Chin, 1998). This method has gained prominence in business and marketing research (Reinartz, et al., 2009). The assessment of a PLS-SEM model involves a two-step process: evaluating the measurement model for reliability, internal consistency, convergent, and discriminant validity (Straub, et al., 2004), followed by an assessment of the structural model. To conduct a comprehensive analysis, this study categorizes advertising content into four distinct models: television commercials, animated content, educational content, and storytelling content. Each content category will be subjected to both measurement and structural model assessments.

4. Results

Table (3) presents the demographic profile of the survey participants. The sample comprised primarily male (52%) and female (48%) respondents. The predominant age group was 20-30, aligning with the study's focus. A majority of participants were single (79%), with the remainder married (21%). The sample was predominantly undergraduate students (68%).

Table 2: Measures of Constructs

Constructs	Measurement	Reference
EM	EM1 The video content attracted my attention	Sadewa et al., (2023)
	EM2 The quality of the video is good.	
PER	PER1 In general, these types of videos can change my perceptions and beliefs.	
	PER2 These videos can affect my perception	
IMP	IMP1 The video gives me the basic information about investing in the EGX.	
	IMP 2 The video has a positive impact on my decision to invest in EGX.	
COM	COM1 The message is conveyed optimally in the video.	
	COM2 I can understand the purpose of the video.	
	COM3 The message conveyed in the video can make me always remember advertisements from EGX	
PK	PK1 EGX videos made me very knowledgeable about investing in the EGX.	Sundar, and Kim, (2005)
	PK2 After seeing EGX videos, I would need to gather very little information to make a wise decision	
	PK3, I feel very confident about my ability to tell the difference in quality among different aspects of EGX video content.	
ME	ME1 I can remember most of the video's content	Zhang, and Yuan (2018)
	ME2 I can describe the "EGX videos content" and "When I see similar advertising, I can recall these videos.	
	ME3 The videos enhanced my impression of Investing in EGX	
A	A1 EGX videos are fun.	Ina (2019)
	A2 EGX videos are attractive.	
I	I1 I will invest in the stock market	Ina (2019) Yang et al., (2021) Sabiran et al (2023)
	I2 I will encourage my friends and family to invest in the EGX	
	I3 I will invest in EGX in the near future.	

Table 3: Demographic profiles

Variables	N	%
Gender		
Male	170	52%
Female	159	48%
Age		
20-30 years	231	70%
31-40 years	54	16%
41-50 years	39	12%
>50 years	5	2%
Education		
Undergraduate	224	68%
Bachelor	42	13%
Postgrad	63	19%
Occupational		
Self Employed	182	55%
Partial employed	31	9%
Full employed	93	28%
Not employed	23	7%
Marital status		
Single	261	79%
Married	68	21%

Notes: This table shows the information related to respondents' profiles in five aspects, i.e. gender, age, marital status, education, and occupation. The number of respondents is n = 329

4.1. Model (1) TV commercial content

To assess convergent validity, item loadings, average variance extracted (AVE), and composite reliability (CR) were examined. As presented in Table 1, item loadings exceeded the recommended threshold of 0.60 (Hair et al., 2017). Moreover, AVE values ranged from 0.596 to 0.842, surpassing the 0.50 criterion. Finally, CR values fell between 0.732 and 0.882, aligning with accepted standards. These findings collectively indicate satisfactory convergent validity for the constructs under investigation. Following the assessment of convergent validity, discriminant validity was examined. Traditionally evaluated using the Fornell-Larcker criterion (1981), this method has been subject to criticism for its limitations in detecting discriminant validity issues in general research contexts (Henseler, et al., 2015). Despite these reservations, the Fornell-Larcker criterion was applied in this study for comparative purposes. According to this criterion, the square root of the average variance extracted (AVE) for each construct should exceed the correlation between that construct and any other construct. As indicated in Table 5, the results suggest sufficient discriminant validity among all constructs.

Table 4: Results of measurement model Construct

	Items	loading	AVE	CR
Advertising effectiveness (AE)	CTV	0.818	0.596	0.732
	ETV	0.771		
	ITV	0.811		
	PTV	0.846		
Perceived knowledge (PK)	PK1	0.846	0.686	0.782
	PK2	0.783		
	PK3	0.855		
Memory efficiency (ME)	M1	0.834	0.719	0.812
	M2	0.857		
	M3	0.854		
Attitudes (A)	A1	0.918	0.842	0.812
	A2	0.917		
Intention (I)	I1	0.889	0.809	0.882
	I2	0.913		
	I3	0.896		

Table 5: Discriminant validity using the Fornell and Lacker criterion.

	A	I	ME	AE	PK
A	0.918				
I	0.615	0.899			
ME	0.639	0.482	0.849		
AE	0.529	0.520	0.527	0.594	
PK	0.562	0.503	0.544	0.533	0.829

To complement the traditional Fornell-Larcker criterion, discriminant validity was further assessed using the Heterotrait-Monotrait (HTMT) ratio of correlations, as proposed by Henseler et al. (2015). This method has demonstrated superior performance in detecting discriminant validity issues compared to alternative approaches (Henseler et al., 2015). The HTMT values were calculated and compared to the recommended thresholds of 0.85 and 0.90 (Kline, 2012). As presented in Table 6, all HTMT values fell below these thresholds, indicating adequate discriminant validity for the measurement model.

Table 6: Heterotrait-monotrait ratio (HTMT)

	A	I	ME	AE	PK
A					
I	0.727				
ME	0.788	0.568			
AE	0.211	0.217	0.289		
PK	0.705	0.607	0.685	0.296	

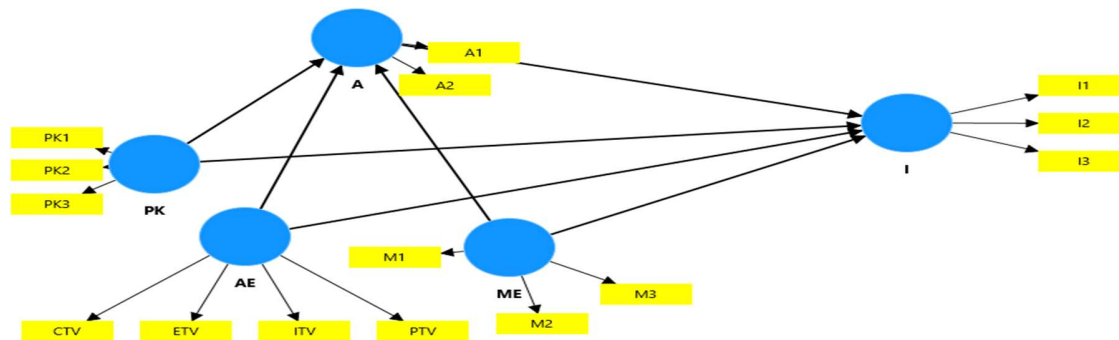


Figure 2: Validated model.

The model's predictive power was assessed through the coefficient of determination (R^2), a measure of the explained variance in investment intention. With an R^2 value of 0.47, the model accounted for 47% of the variance in investment intention, suggesting enough level of explanation provided by advertising effectiveness, perceived knowledge, memory efficiency, and attitudes. further statistical significance assessment, the current study calculated path coefficients of the structural model and performed the bootstrap analysis. According to the results, as shown in Table 4, perceived knowledge and memory efficiency were found to have a statistical relationship with the investment intention in EGX via attitude. perceived knowledge has a positive association with investment intention in EGX the beta values of $b = 0.202$, advertising effectiveness (EPIC) Was found to have an insignificant relationship with investment intentions and attitudes furthermore Memory efficiency was found to have insignificant with investment intentions. Thus, H3, H5, H6 and H7 are supported. In the validated model, as shown in Figure 2, the SRMR (Standardized Root Mean Square Residual) is defined as the difference between the observed correlation and the model-implied correlation matrix. Thus, it allows assessing the average magnitude of the discrepancies between observed and expected correlations as an absolute measure of the (model) fit criterion. A value less than 0.10 or 0.08 is considered a good fit (Hu and Bentler, 1999). Henseler et al. (2015) introduce the SRMR as a goodness-of-fit measure for PLS-SEM that can be used to avoid model misspecification. in the current study SRMR 0.064 which is <0.08 (Chen et al., 2008).

Table 7: Results of the structural model

Hypothesis	R/ship	St. Beta	SE	T-value	P values	Decision
H4	AE -> A	0.010	0.042	0.237	0.813	Not supported
H1	AE -> I	-0.047	0.054	0.875	0.382	Not supported
H5	ME -> A	0.477	0.067	7.112	0.000*	Supported
H2	ME -> I	0.081	0.063	1.289	0.198	Not supported
H6	PK -> A	0.302	0.060	5.030	0.000*	Supported
H3	PK -> I	0.202	0.067	3.008	0.003*	Supported
H7	A -> I	0.443	0.062	7.126	0.000	Supported

Notes: This table shows the results of the structural model using partial least square (PLS) version 4. The R-square value is 0.47 and the sample size is 329. The signs *, denote significance at 5 %.

4.2. Model (2): Animation content Videos

Table 8 shows item loadings exceeded the recommended threshold of 0.60 in addition, AVE values ranged from 0.522 to 0.842, exceeding the 0.50 criterion. Finally, CR values fell between 0.745 and 0.927, aligning with accepted standards. These findings collectively indicate satisfactory convergent validity for the constructs under investigation. In Table 7, the results suggest sufficient discriminant validity among all constructs. As presented in Table 10, all HTMT values fell below these thresholds, indicating adequate discriminant validity for the measurement model. In addition, The model (2) predictive power with an R² value of 0.47.

Table 8: Results of measurement model Construct

Construct	Items	loading	AVE	CR
Advertising effectiveness (AE)	CAN	0.845	0.522	0.745
	EAN	0.942		
	IAN	0.980		
	PAN	0.692		
Perceived knowledge (PK)	PK1	0.846	0.686	0.868
	PK2	0.783		
	PK3	0.855		
Memory efficiency (ME)	M1	0.839	0.720	0.885
	M2	0.861		
	M3	0.845		
Attitudes (A)	A1	0.919	0.842	0.914
	A2	0.916		
Intention (I)	I1	0.888	0.809	0.927
	I2	0.913		
	I3	0.896		

Table 9: Discriminant validity using the Fornell and Lacker criterion.

	A	I	ME	AE	PK
A	0.918				
I	0.616	0.899			
ME	0.640	0.482	0.899		
AE	0.646	0.481	0.848	0.462	
PK	0.561	0.505	0.548	0.230	0.829

Table 10: *Heterotrait-monotrait ratio (HTMT)*

	A	I	ME	AE	PK
A					
I	0.727				
ME	0.788	0.568			
AE	0.136	0.078	0.178		
PK	0.705	0.607	0.685	0.126	

According to the results, as shown in Table 11 for model 2, perceived knowledge and memory efficiency were found to have a statistical relationship with the investment intention in EGX via attitude. perceived knowledge and memory efficiency for animation videos have a positive association with investment intention in EGX with the beta values of $b = 0.235$ and 0.476 respectively, advertising effectiveness (EPIC) based on animation videos was found to have an insignificant relationship with investment intentions and attitudes. Thus, H3, H4, H5, H6 and H7 are supported. in the validated model The SRMR is 0.042 which is <0.08 .

Table 11: Results of structural model

Hypothesis	R/ship	St. Beta	SE	T-value	Pvalues	decision
H4	AE -> A	0.063	0.085	0.745	0.456	Not Supported
H1	AE -> I	-0.033	0.053	0.625	0.532	Not Supported
H5	ME -> A	0.466	0.066	7.091	0.000*	Supported
H2	ME -> I	0.476	0.066	7.169	0.000*	Supported
H6	PK -> A	0.297	0.061	4.847	0.000*	Supported
H3	PK -> I	0.235	0.066	3.538	0.000*	Supported
H7	A -> I	0.489	0.063	7.762	0.000*	Supported

*Notes: This table shows the results of the structural model using partial least square (PLS) version 4. The R-square value is 0.47 and the sample size is 329. The signs *, denote significance at 5 %.*

4.3. Model (3): Educational Content Videos

Table 12 shows item loadings exceeded the recommended threshold of 0.60 in addition, AVE values ranged from 0.519 to 0.842, exceeding the 0.50 criterion. Finally, CR values fell between 0.679 and 0.882, aligning with accepted standards. These findings collectively indicate satisfactory convergent validity for the constructs under investigation. In Table 13, the results suggest sufficient discriminant validity among all constructs. As shown in Table 14, all HTMT values fell below thresholds, indicating adequate discriminant validity for the measurement model. In addition, The model (2) predictive power with an R^2 value of 0.48. According to the results, as shown in Table 13 for model 3, perceived knowledge and memory efficiency were found to have a statistical relationship with the investment intention in EGX via attitude and intention. effectiveness (EPIC) based on educational content videos was found to have an insignificant relationship with investment intentions and attitudes furthermore. Thus, H3, H4, H5, H6 and H7 are supported. in the validated model The SRMR 0.057 which is <0.08 .

Table 12: Results of measurement model Construct

Construct	Items	loading	AVE	CR
Advertising effectiveness	CED	0.623	0.519	0.679
	EED	0.652		
	IED	0.652		
	PED	0.677		
Perceived knowledge	PK1	0.846	0.686	0.782
	PK2	0.783		
	PK3	0.855		
Memory efficiency	M1	0.839	0.720	0.807
	M2	0.861		
	M3	0.845		
Attitudes	A1	0.918	0.842	0.812
	A2	0.917		
Intention	I1	0.889	0.809	0.882
	I2	0.913		
	I3	0.896		

Table 13: Discriminant validity using the Fornell and Lacker criterion

	A	I	ME	AE	PK
A	0.917				
I	0.617	0.899			
ME	0.640	0.484	0.848		
AE	0.204	0.594	0.533	0.437	
PK	0.561	0.505	0.548	0.117	0.829

Table 14: Heterotrait-monotrait ratio (HTMT)

	A	I	ME	AE	PK
A					
I	0.727				
ME	0.788	0.568			
AE	0.163	0.090	0.115		
PK	0.705	0.607	0.685	0.099	

Table 15: Results of structural model

Hypothesis	R/ship	St. Beta	SE	T-value	P values	decision
H4	AE -> A	0.108	0.114	0.945	0.345	Not Supported
H1	AE -> I	-0.009	0.052	0.170	0.865	Not Supported
H5	ME -> A	0.462	0.065	7.122	0.000	Supported
H2	ME -> I	0.623	0.050	12.484	0.000	Supported
H6	PK -> A	0.297	0.058	5.073	0.000	Supported
H3	PK -> I	0.233	0.063	3.688	0.000	Supported
H7	A -> I	0.486	0.060	8.084	0.000	Supported

Notes: This table shows the results of the structural model using partial least square (PLS) version 4. The R-square value is 0.47 and the sample size is 329. The signs *, denote significance at 5 %.

4.4. Model (4): Storytelling Content Videos

Table 16 shows item loadings exceeded the recommended threshold of 0.60 in addition, AVE values ranged from 0.511 to 0.842, exceeding the 0.50 criterion. Finally, CR values fell between 0.734 and 0.914, aligning with accepted standards. These findings collectively indicate satisfactory convergent validity for the constructs under investigation. In Table 17, the results suggest sufficient discriminant validity among all constructs. As indicated in Table 18, all HTMT values fell below thresholds, indicating adequate discriminant validity for the measurement model. In addition, The model (2) predictive power with an R^2 value of 0.47. According to the results, as shown in Table 19 for model 4, perceived knowledge and memory efficiency and advertising effectiveness based on storytelling videos were found to have a statistical relationship with the investment intention in EGX. Advertising effectiveness (EPIC) based on storytelling content videos was found to have an insignificant relationship with investment intentions via attitudes. Thus, H2, H3, H4, H5, H6 and H7 are supported. in the validated model The SRMR 0.06 which is <0.08.

Table 16: Results of Measurement Model Construct

Construct	Items	loading	AVE	CR
Advertising effectiveness	CST	0.643	0.511	0.734
	EST	0.531		
	IST	0.695		
	PST	0.681		
perceived knowledge	PK1	0.846	0.686	0.868
	PK2	0.783		
	PK3	0.855		
Memory efficiency	M1	0.834	0.719	0.885
	M2	0.857		
	M3	0.854		
Attitudes	A1	0.918	0.842	0.914
	A2	0.917		
Intention	I1	0.888	0.809	0.927
	I2	0.912		
	I3	0.897		

Table 17: Discriminant validity using the Fornell and Lacker criterion.

	A	I	ME	AE	PK
A	0.917				
I	0.617	0.899			
ME	0.640	0.484	0.848		
AE	0.178	0.209	0.548	0.209	
PK	0.561	0.505	0.505	0.641	0.829

Table 18: Heterotrait-monotrait ratio (HTMT)

	A	I	ME	AE	PK
A					
I	0.727				
ME	0.788	0.568			
AE	0.275	0.303	0.225		
PK	0.705	0.607	0.685	0.233	

Table 19: Results of structural model

Hypothesis	R/ship	St. Beta	SE	T-value	P values	decision
H4	AE -> A	0.065	0.040	1.629	0.104	Not Supported
H1	AE -> I	0.091	0.038	2.392	0.017	Supported
H5	ME -> A	0.469	0.066	7.152	0.000*	Supported
H2	ME -> I	0.083	0.062	1.344	0.002*	Supported
H6	PK -> A	0.295	0.060	4.919	0.000*	Supported
H3	PK -> I	0.204	0.069	2.966	0.003*	Supported
H7	A -> I	0.431	0.063	6.888	0.000*	Supported

Notes: This table shows the results of the structural model using partial least square (PLS) version 4. The R-square value is 0.47 and the sample size is 329. The signs *, denote significance at 5 %.

4.5. Mediation Result

The Key Findings show that Advertising Effectiveness (EPIC Dimension) has no mediating effects on attitudes for any of the four video content types. Whereas Perceived Knowledge for TV Commercial, Animation, Educational, and Storytelling has complementary partial mediation, indicating that both direct and indirect effects were significant and pointed in the same direction. Memory Efficiency for TV Commercial has Full mediation, indicating that attitudes fully explained the association between memory efficiency and intention to invest (indirectly only). Complementary partial mediation is found for Animation, Educational, and Storytelling videos. The results for perceived knowledge and memory efficiency vary across the four video content types. This inconsistency suggests that the mediating role of these constructs is influenced by the specific characteristics of each content type. Lack of mediation for Advertising Effectiveness implies that the direct impact of this dimension on attitudes is more pronounced than its indirect influence through other constructs. The full mediation found in the TV commercial for the relationship between memory efficiency and intention to invest is noteworthy. It suggests that attitudes are a critical intermediary in this relationship and that improving attitudes may be a more effective way to influence intention to invest than directly targeting memory efficiency. The frequent occurrence of complementary partial mediation across the different content types indicates that both direct and indirect effects are important in explaining the relationships between perceived knowledge and memory efficiency to invest. This suggests a complex interplay of factors influencing investor behavior.

6. Discussion

The findings of this study show a statistically significant relationship between the EPIC dimensions of advertising effectiveness in storytelling content videos and investment intention in the EGX. Storytelling has proven to be a potent and enduring communicative medium (Alterio and McDrury, 2003). This narrative approach has increasingly become a pivotal element in influencing diverse domains, including education, marketing, and a wide range of other human endeavors (Kadembo, 2012). Contemporary marketing strategies recognize storytelling as a strategic tool for

conveying brand identity and differentiating products or services (Srinivasan, 2005). The current study suggests that storytelling's ability to enhance its persuasiveness to quantitative information contents, such as financial data, is crucial for investment decisions. Storytelling's logical and coherent structure aligns with the rational decision-making processes inherent in investment. Moreover, the dynamic interactions between characters within storytelling content enhance its appeal to audiences. Byun (2016) posits that storytelling effectively facilitates the transmission of complex information to recipients.

The study reveals a statistically significant relationship between perceived knowledge, memory efficiency, and investment intention in the EGX. These variables have been identified in the literature as critical determinants of advertising effectiveness as they enhance consumer interest and engagement (Braun-LaTour et al., 2004)). Perceived knowledge (PK) and attitudes yield significant results. Attitude serves as a strong predictor of purchase intent, aligning with foundational attitudinal research that posits attitude as a precursor to purchase intent (Ajzen and Fishbein, 2005). To explore the mediating role of perceived knowledge on attitude, hypotheses H3, and H6 were examined, revealing that attitude indeed mediates this relationship partially. While perceived knowledge significantly influences investment intentions, a low level of attitude can still mediate this connection. Consequently, the direct influence of perceived knowledge on intent to invest in EGX through attitudes. The accessibility of information and knowledge regarding services can shape personal attitudes and beliefs derived from that information, thereby enhancing the understanding of the relative importance of factors influencing investor choices (Hoque et al., 2018; Kearney and McElhone, 1999). Conversely, the three alternative advertising content formats (television, animation, and educational content) exhibit no significant influence on advertising effectiveness (EPIC dimensions) regarding investment intention in the EGX. This finding suggests that respondents perceive these videos content formats as less effective based on the EPIC dimensions, as indicated by the statistical tests (St Bet and F Square). Although educational adverts can be valuable in building awareness and credibility in the consumer community, their impact on buyer intentions may be limited due to factors such as emotional appeal, information overload, and relevance (Baumeister, 2012). Consistently, the animation may not be the most effective format for all target audiences such as mature investors. Animated characters and scenes can sometimes be perceived as less realistic compared to other types of video content, potentially diminishing product credibility and consumer trust (Keller, 2013).

7. Conclusion

The burgeoning use of diverse advertising formats by stock exchanges to stimulate investment underscores the imperative for both practitioners and academic researchers to identify optimal marketing strategies. This study contributes to this Endeavor by examining the factors influencing early investors' intent to participate in EGX. In this paper, we assigned four types of videos about investing in EGX to randomly selected individuals to identify the most effective type of videos that could increase their intention to invest in the Egyptian stock market. The four types of videos

include TV videos, educational videos, animation videos, and story videos. All these videos are created and published by the Egyptian Exchange (EGX) on its official YouTube channel. Through the application of partial least squares (PLS) analysis to data collected from 329 participants, the study identifies perceived knowledge, memory efficiency, and EPIC model dimensions as key predictors of investment intent. Our model explains 47% of the variance in investment intention, emphasizing the substantial influence of these factors. Future research should delve deeper into the dynamic relationship between advertising content and early investor behavior, as well as the moderating role of demographic factors on investment intent. Moreover, future research can be extended to examine the effectiveness of the stock exchange simulators on increasing participation in the stock market.

The findings of this study offer valuable insights for EGX in its pursuit of attracting early-stage investors. By demonstrating the significant influence of perceived knowledge, memory efficiency, and EPIC model dimensions on investment intent, this research provides a strategic roadmap for developing effective advertising campaigns. The emphasis on storytelling content as a potent tool for motivating investment intentions underscores the need for narrative-driven communication strategies. Moreover, the importance of enhancing perceived knowledge highlights the necessity for clear and easily digestible information dissemination. By strategically employing memory-enhancing techniques within storytelling advertisements, EGX can increase the salience and recall of its messaging, thereby fostering a stronger investment inclination among target audiences.

Moreover, we recommend institutions in the investment industry, especially brokerage companies to use the storytelling videos to increase awareness of potential investors about investing in EGX. Besides the protocol between EGX and the Ministry of Education to use stories about investment in EGX, the Ministry of Education can encourage schools to use storytelling videos in the classes for children. Finally, investment firms could create a simple simulator as a game for school students to learn basic information about investment and trading in EGX. Future research can be extended to examine the specific characteristics of each video content type (e.g., narrative structure, visual style, messaging) to identify how they may contribute to the observed differences in mediation effects. Moreover, future research can examine mediating variables such as perceived trust and perceived quality to explore alternative pathways influencing investor behavior. More Conduct longitudinal studies can be implemented to assess the long-term effects of these video content types on potential investor attitudes, knowledge, and behavior.

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