EVALUATING ATTITUDES AND INTENTION TO USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE) DURING THE COVID- 19 PANDEMIC

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ABSTRACT

Current study aimed at evaluating of attitudes, beliefs, satisfaction, actual practice and intention to use of Personal Protective Equipment (PPE) during the Covid-19 pandemic. Current study's key messages are divided into two main parts; first one is an approach for policy makers to identify approaches that would help individuals to commit to health rules and regulations when it comes to socializing during the pandemic and the second one would be helpful for society individuals to be more able to identify their attitudes and satisfaction towards PPE and start figuring out their options and preferences. Through depending on quantitative approach, 421 individuals were exposed to an online self-administered questionnaire which aimed at collecting primary data for analysis. Depending on SPSS and AMOS, results of study indicated that customers' attitude positively affect beliefs and satisfaction but has no effect on actual practice and intention to use, beliefs were found to be influential in a positive way on actual practice but has no positive effect on intention to use, in addition to that satisfaction was found to be positively influential on actual practice and intention to use, and there was a positive relationship between actual practice and intention to use. Study recommended socially monitoring individuals' attitudes and satisfaction regarding PPE that are available in the market, and control vague parties that may appear in the marketing promoting for new types and material of personal protective equipment.

Keywords: Personal Protective Equipment (PPE), Attitudes, Beliefs, Satisfaction, Actual Practice, Intention to Use, Covid-19

INTRODUCTION

According to WHO (2020), the pandemic of coronavirus disease 2019 (Covid-19) is an unprecedented situation that we have never experienced during the last century. As a result of spread of Covid-19, more than 3 billion and 380 million people around the world have been ordered to comply with isolation measures and affects all aspects of life, such as social life, economic situation and health and psychological status, people have become convinced of the need to distance them and not to be in large gathering. Covid-19 has affected economic situation greatly causing millions of jobs losing, sporting events has been canceled, elections postponed, school closures and travel bans (Simpson & Sandrin, 2021; Sunny et al., 2021; Nurkhasanah & Santoso, 2020). This virus changed the whole world in terms of individuals' behavior and the degree of readiness of governments to face the virus, many changes have been applied in order to prepare the world for a virus that may spread and breakout in a fast pace, governments started to implement precautionary measures and prepared its competences for a fast international collapse based on the spread of a virus that is deemed vague to them and the medical community. With the spread of the Covid-19,

governments are trying to limit its spread and face its repercussions through strict measures (Van Bortel et al., 2016; Harizi et al., 2020; Nicola et al., 2020).

One of the measures that governments have taken is quarantine, which has contributed greatly to limiting the spread of this virus as it happened with many diseases that have claimed the lives of millions throughout history. Quarantine scenarios revealed that it plays a vital role in controlling the spread of Covid-19 disease, compared to any other preventive measures applied without it, as it led to a decrease in the infection rate. Moreover, the combination of quarantine measures with other preventive measures had a greater impact on reducing the number of cases requiring critical care as well as the number of deaths, compared to applying quarantine measures alone ((Abdelhafiz et al., 2020; Sunny et al., 2021).

With the spread of Covid-19 and the different experiences of countries in dealing with this virus as an emerging epidemic; there have been conflicting opinions and speculations, so that people are subject to changing their consensus and attitudes towards dealing with this disease based on the rumours circulating through social media platforms. Some of them indicated that the whole virus is just a conspiracy against humanity, and some of them believed that this virus actually exists and kills many lives, and other opinions appeared that this virus was manufactured in a biological laboratory as a kind of war and terrorism and many different rumours (Ali, 2020). These rumours have led to differing attitudes and opinions of individuals about the importance of adhering to the protective equipment and dealing with it to ensure that the spread of the virus is limited in a way that kills more lives around the world.

Individuals who perceive a particular risk are assumed to engage in more preventive health behaviours to avoid or minimize health risks (Chen et al., 2017). Yoon, et al., (2017) mentioned that when individuals perceive the probability and consequences of contracting a disease to be high, they are motivated to undertake self-protective activities. Self-protective activities such as hand-washing, mask-wearing, gloves-wearing, hand hygiene, social distancing and vaccination could also contribute to slowing down the epidemic and preventing the spread of the virus. Yildiz (2020) noted that the individual's need for a specific product is capable of changing the behavioral pattern of the individual, and the degree of impact varies according to the importance of the commodity sought to be obtained, and in the current situation of the spread of a new pandemic to the world, the behavior of individuals differed and directed towards attempts to reach sterilization, regulation and personal hygiene materials with high quality and reasonable prices.

In the study Abdul-Khalek & Eid (2020), declared that behavioral intentions of health care practitioners towards protective equipment- after dealing with each patient were analyzed, and through the analysis it was proved that most of the sample members either always or almost always used protective equipment after dealing with each patient, but we still believe behavioral intentions to sterilize hands after every patient is something that is not taken with great importance and seriousness. This is for health care workers, so how about ordinary individuals who do not work in the health field and who do not have permanent access to sterilizers and detergents, it is certain that their behavioral and attitudes towards sterilization and sterile and protective materials will be less serious than those who they work in the health field.

The impact of this virus on society has not ended, and these effects may become an integral part of our future life. It is difficult to return to the life pre-corona, and the preventive tools that we use such as gloves, mask, the procedures followed such as staying away from large gathering and restriction our occasions to a small number of people, may become permanent matters in our life.

From those points, this current study seeks to evaluate attitudes, beliefs, satisfaction, actual practice and intention to use of personal protective equipment during the Covid-19 pandemic.

LITERATURE REVIEW

According to Handayani, et al., (2020) change in human attitudes towards the use or obtain of utilities is highly influenced by the surrounding environment. People tend in their nature to change their attitude towards things when they see other people do the same thing, this is normally attributed to the nature of human being and their tendency to cope with different situation in order to have the ability to move on and keep living with their normal life.

During the Covid-19 pandemic, many studies focused on the important of personal protective equipment in preventing the spread of the virus, as protective equipment formed a barrier to protect individuals from the virus by reserving the small drops that come out with the breath, and thus ensuring that the infection is not transmitted (Panovska-Griffiths et al., 2020; Fadil et al., 2020; Hussain et al., 2020). At the same time, some previous studies were investigated the attitudes, beliefs, satisfaction, actual practice and intention to use of personal protective equipment by individuals. Some of previous studies related to this study are:

In the study by Alao, et al., (2020) indicates that there has become an urgent need to help civilian personnel as well as health workers about the importance of dealing with PPE correctly as a means of limiting the spread of the virus among individuals and its rapid transmission between them. The study found that the attitudes, knowledge and beliefs of health workers regarding the importance of PPE were very difficult, and they proved that they need practical training in how to deal with and dispose of protective equipment in order to help in reducing the spread of infection between individuals.

Another study by Simpson & Sandrin (2021) investigated attitudes, beliefs and satisfaction of police officers towards using protective equipment during Covid-19 pandemic. The study proved that the sample members have perception and positive attitudes towards the use of PPE considering that they are very important and useful in limiting the spread of the virus, and most of them have a high intention in using this equipment voluntarily.

In a similar way, Dodamani, et al., (2020) revealed that the attitudes, intentions and behaviors of practitioners of the dental profession towards the use of medical gloves depends on the ability of the type of medical gloves to provide protection first and last, followed by the comfort that can be provided to the user. Moreover, the participants in the study explained that they do not change the gloves they use until they are treated with the same gloves for 3 continuous hours.

From another perspective, Huynh (2020) indicated that only 22.25% of people in Vietnam know the right way to use a surgical mask and dispose it properly. This can be attributed to the two main factors, the first is that wearing a face mask has become compulsory in the almost all country and people normally have negative attitudes towards compulsory regulations that limit their freedom, and the other factor is the low level of experience that they have in using, wearing and deposing surgical mask.

Ekuma, et al., (2019) stated that product quality can play a role in changing attitudes and satisfaction of individuals towards using it. This idea was manifested through the study when authors tried to examine level of hand hygiene among hospital workers during 2018-2019. Results of study indicated that most individuals have low level of hand hygiene which is attributed to their low satisfaction of hygienic products and materials which decreased their intention to preserve higher hand hygiene due to low satisfaction.

The same idea appeared earlier by Kartikasari & Albari (2019) when they argued that product quality hold a lot of responsibility in terms of supporting consumer decision and at the same

time influence their behavior towards low intention to use such products and generalize the idea on all other brands as well.

According to study by Jha & Pradhan (2020), individuals' attitudes and intention to use hygiene products was found to be highly influenced by the quality of the product and its price, normally individuals aren't convinced to use low quality products launching from their belief that since the quality is low then this product wouldn't do the needed job, at the same time, the price was found influential as well given that hygiene and medical products should be determined by affordable prices due to their existence as necessities not luxury.

The same idea was brought and agreed on by Esposito, et al., (2020) when they argued that not only personal protection controls customers' behavior towards purchasing and wearing a mask, of course all people seek to protect themselves and no one likes to get sick, but there are many factors that determines attitudes, satisfaction and intention to use face masks among individuals which can include the quality, price, material and marketing. All of these factors have the ability to change attitudes of individuals towards face masks.

MODEL AND HYPOTHESES DEVELOPMENT

Study Model

Reaching main aim of study was able to be achieved through realizing the following main objective: Identify individuals' attitudes towards using personal protective equipment. The relationship between variables was thoroughly highlighted through the following model:
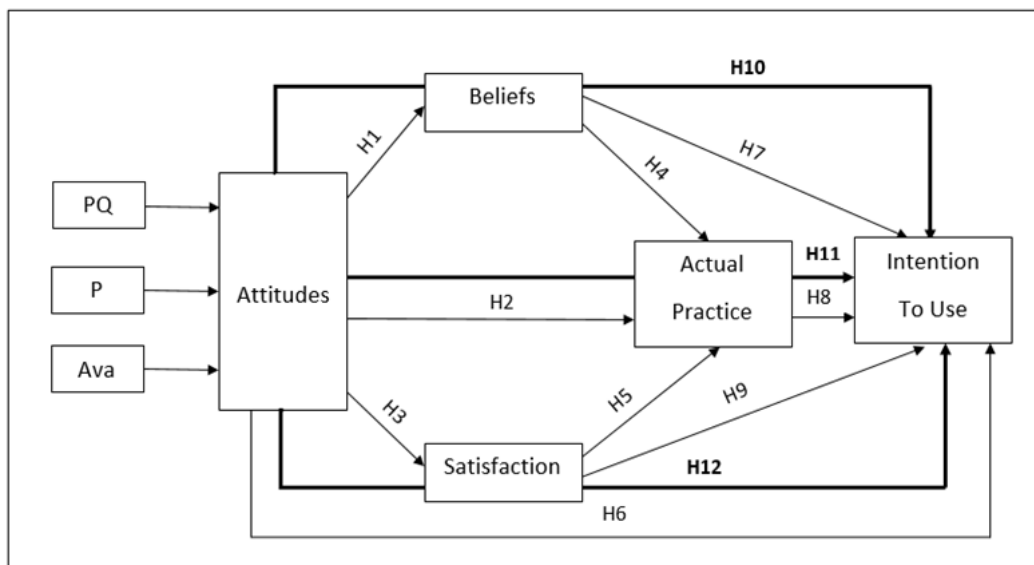

FIGURE 1
STUDY CONCEPTUAL MODEL

Hypotheses Development

Personal protective equipment is personal protective tools and items that include clothing, helmets, goggles, or equipment designed to protect the person's body from injury or infection. Personal protective equipment may be worn for work activities as well as for sports and other

recreational activities (Sharma & Bhatta, 2020; Petrocchi et al., 2020). The purpose of personal protective equipment is to reduce an employee's exposure to hazards to acceptable levels (Poranki et al., 2015).

According to Haque, et al., (2020), personal protective equipment is needed when there are risks. Moreover, personal protective equipment has serious limitations as it does not eliminate the hazard at the source but may put employees at risk if the equipment breaks down, any item of personal protective equipment imposes a barrier between the wearer/user and the work environment (Balaji & Baskaran, 2018). Therefore, a good ergonomic design of PPE can help reduce these barriers and thus can help and ensure safe and healthy working conditions (Handayani et al., 2020).

Haischer, et al., (2020) believed that with the increase in the spread of the pandemic and the necessity to adhere to wearing protective face masks and breathing, the demand for these protective masks has increased in the market. Furthermore, since governments issued a mandatory order to wear protective masks in public places, the demand for them has increased dramatically to the point that the household needs for these masks exceeded the needs for treatment, food and medicine.

According to the study of Picard, et al., (2020), it was found that even health sector workers do not adhere to guidelines related to the use of protective equipment, such as disposing them after each use, not being used repeatedly among patients, and not placing them around the neck, which led to the increased spread of the virus through protective gear rather than reducing it. Infections among health care workers was the biggest concern for governments, considering that they are the first confrontation with people with Covid-19, in addition to their lack of full commitment to the foundations of health protection by wearing PPE while dealing with patients.

On the other hand, Palupi, et al., (2020) noticed that most of the personnel working and supplying food had little knowledge of hygiene practices, such as the use of face masks and gloves, and on the other hand, the results of the study indicated that the training received by food handlers and catering practitioners in the hospital was related to the extent of knowledge and attitudes towards hygiene and sanitation are generally good, and the study recommended that there is a need to improve the practice through training programs.

Chao (2020) examined Adolescents' dealing with face mask during the breakout of Covid-19. The study revealed that most of them use the same face mask for the whole day and they remove it in places which are relatively safe, in addition to that, they store the same used mask in their pockets and reusing the same mask again. Study indicated that intention to reuse face masks among Taiwan adults are high but their approach in using it is very low indicating that their attitudes isn't serious when it comes to protecting themselves against Covid-19.

Arun & Nivekha (2019) tried to study the factors that would influence the consumer's purchasing behavior in relation to personal hygiene products, which included (cost, multiplicity addiction, genuineness, duplicity, too many choices, Lack of knowledge, offers, situational factors, and seasonal accounts) and through Analysis, the study proved that all the aforementioned factors have an impact on changing consumer behavior towards buying personal hygiene products, but the most influential of them was cost and multiplicity, meaning that individuals are more sensitive to the cost of these products and the multiplicity of their types and brands, and thus are affected by these two factors more the change of consumers' attitudes and their purchasing intentions towards personal hygiene products.

As for Nurkhasanah & Santoso (2020), they decided to study the effect of product quality, price, and marketing on individuals' purchasing decision regarding face mask during the Covid-19 pandemic, and the study proved that most individuals focus on the fact that the three

aforementioned factors have an impact on the purchasing decision of individuals regarding the assigned masks. For the face, and the price was the first, meaning that individuals usually associate the quality of the product with its price, so the higher the price, the individuals were convinced that the quality of the product was higher and therefore worth buying.

From above study model and literature review, researchers were able to extract the following set of hypotheses:

H1   Attitudes positively affect beliefs of personal protective equipment.
H2   Attitudes positively affect actual practice of personal protective equipment.
H3   Attitudes positively affect satisfaction of personal protective equipment.
H4   Attitudes positively affect intention to use of personal protective equipment.
H5   Beliefs positively affect actual practice of personal protective equipment.
H6   Satisfaction positively affects actual practice of personal protective equipment.
H7   Beliefs positively affect intention to use of personal protective equipment
H8   Actual practice positively affects intention to use of personal protective equipment.
H9   Satisfaction positively affects intention to use of personal protective equipment.
H10   Attitudes positively affect intention to use of personal protective equipment via beliefs
H11   Attitudes positively affect intention to use of personal protective equipment via actual practice.
H12   Attitudes positively affect intention to use of personal protective equipment via satisfaction.

METHODS

Methodological Approach

Current study followed the quantitative approach in order to realize its aim. Quantitative approach is basically a research method that depends on numerical data (extracted from primary data) through certain math software, the aim of such numerical data is to present an orientation of results that matches what the researchers has hypothesized before, either through accepting or rejecting the hypotheses.

Study Tool

Gathering the primary data for realizing aim of current study was done depending on a questionnaire as a tool. The questionnaire was built depending on previous studies which included Andreti, et al., (2013); Park & Lin (2020); Park, et al., (2021); Furaiji, et al., (2012); Shrestha, et al., (2020) & Savoia, et al., (2020). The questionnaire consisted of two main parts, the first took into perspective demographics of study sample including (gender, age, qualification, occupation and monthly income), while the other part consisted of statements related to the variables of study including (attitudes, beliefs, actual practice, satisfaction and intention to use). The questionnaire in its final version reached (27) statement on likert scale (1 strongly disagree, 2 disagree, 3 neutral, 4 agree, and 5 strongly disagree).

Population and Sampling

Population of study consisted of (500) consumer within Jordan-Amman. A convenient sample of (500) individuals was chosen to represent population of study. After application process researchers were able to retrieve (421) properly filled questionnaires which indicated a response rate of (84.2%) as statistically accepted.

Screening and Analysis

SPSS and AMOS were used in order to screen and analyze primary data, statistical tests used in current study included: Descriptive Statistics, Internal Consistency and Structural Equation Model (SEM) using Path Analysis.

RESULTS

Demographic Analysis

According to demographic variables of the study as appeared in Table 1, as for the individuals' gender, 67% of them were males and the others are females with 33%. As for ages, it appeared that the age range of less than 30 consist of 59.4% of total sample and followed by the age of 31-45 with 21.6% and 46-60 years with 15.9% of the sample. Regarding the education, 56.3% of them hold a bachelor degree, followed by post graduate the with 15.7% and high school and less with 15%, while individuals who had an income of JD 500 and less formed 52.7%, followed by the income of JD 501-1000 with 28.5% and JD 1001-1500 with 11.2%. Furthermore, individuals who were employed within private or civil servant sector forming 44.9%, followed by the own business with 20.2% and student with 20.0%.

Table 1 DESCRIPTIVE STATISTICS OF DEMOGRAPHICS			
Factor		**F**	**%**
Gender	Male	282	67.0
	Female	139	33.0
Age	30 and less	250	59.4
	31-45	91	21.6
	46-60	67	15.9
	More than 61	13	3.1
Education	High School and Less	63	15.0
	Diploma	55	13.1
	BA	237	56.3
	Post Graduate	66	15.7
Income(1USD=0.71 JD)	JD 500 and less	222	52.7
	JD 501-$1000	120	28.5
	JD 1001-1500	47	11.2
	More than JD 1501	32	7.6
Job	Private or Civil Servant	189	44.9
	Own Business	85	20.2
	Student	84	20.0
	Retired	17	4.0
	Others	46	10.9
	Total	421	100.0

Questionnaire Analysis

Following table 2 presented mean and standard deviation of sample responses to questionnaire statements. As it can be seen from the table that sample individuals had positive attitudes towards statements of study as all of the statements scored higher than mean of scale; the highest statements appeared to be for the benefit of "beliefs" variables which was articulated "I

believe that personal protective products are important in saving lives" scoring a mean of 4.10/5.00. On the other hand, the lowest mean was for the statement from "price" variable and was articulated "personal protective products are available in the market with reasonable prices" scoring a mean of 3.26/5.00. Giving more generalized results of questionnaire, table 2 below showed mean and standard deviation of study variables, it can be seen that the highest mean was for the variable of 'availability' scoring a mean of 3.89/5.00 compared to the least–but positive–relationship to the variable of 'product quality' which scored a mean of 3.64/5.00.

Table 2 MEAN AND STANDARD DEVIATION		
Statement	M	S.D
Attitudes		
PPE available in the market with a high quality	3.54	0.955
PPE available in the market are safe for Covid -19	3.43	0.902
PPE are compatible and fit for use	3.67	0.756
A variety or types of PPE are available for selection	3.96	0.743
Product Quality	**3.65**	**0.613**
PPE are available in the market with reasonable prices	3.26	1.08
PPE have many price levels	3.85	0.855
High quality PPE have high prices	3.35	1.19
Price	**3.49**	**0.800**
PPE are available in nearby shopping centers	4.05	0.784
PPE are easily obtained from the market	4.06	0.790
PPE are placed at a separate section that is easy to find	3.89	0.844
PPE can be conveniently purchase online	3.59	0.974
Availability	**3.90**	**0.641**
Beliefs	**3.76**	**0.714**
I believe that Covid -19 is a serious disease and can lead to death	3.80	1.08
I believe that Covid -19 outbreak will continue for a long time	3.93	0.986
I believe that PPE are important in saving lives	4.10	0.890
I believe that using high quality of PPE can prevent the Covid -19	3.62	1.06
I believe that People should use PPE, even they are more expensive	3.37	1.11
Actual Practice	**3.82**	**0.703**
I am using a high PPE	3.52	1.02
I always use PPE whenever I go outside	4.08	0.823
I always change and dispose of my PPE properly	3.93	0.859
I follow the instructions given government and medical departments	3.76	0.972
Satisfaction	**3.69**	**0.805**
I am satisfied with using of PPE available in the market	3.42	0.980
My choice to use of high quality PPE has been a wise one	3.88	0.882
I think that I did the right thing when I used the PPE	3.78	0.954
Overall, I am satisfied with specific experience with the PPE	3.70	0.953
Intention to Use	**3.65**	**0.869**
I intend to buy PPE because I am concerned about my and others health	3.79	0.933
I intend to use PPE for a long term time	3.46	1.11
I plan to use PPE in regular basis in future even the vaccine is effective	3.70	1.04

Internal Consistency

Validity and reliability tests were conducted to evaluate the measurement model for the full sample (n=421). As shown in the Table 3, factor analysis was used to test the content validity of the

scale as well, Average Variance Extracted (AVE) was calculated and all the results is greater than the accepted percent 0.60 Also, Composite Reliability (CR) and Cronbach's alpha are >0.70 (Hair et al., 2010). These results confirmed that the Validity and reliability of the latent variables was satisfactory and fit to be used for testing hypotheses.

Table 3 INTERNAL CONSISTENCY						
Variable		No. of item	Factor Loading	AVE	CR	Cronbach alpha
Product Quality	Attitudes	Q1	0.773	0.714	0.818	0.702
		Q2	0.785			
		Q3	0.818			
		Q4	0.610			
Price		Q5	0.806	0.617	0.828	0.681
		Q6	0.791			
		Q7	0.758			
Availability		Q8	0.806	0.777	0.846	0.744
		Q9	0.854			
		Q10	0.757			
		Q11	0.615			
	Beliefs	Q12	0.737	0.823	0.827	0.731
		Q13	0.494			
		Q14	0.824			
		Q15	0.723			
		Q16	0.695			
	Actual Practice	Q17	0.678	0.788	0.852	0.759
		Q18	0.780			
		Q19	0.840			
		Q20	0.769			
	Satisfaction	Q21	0.722	0.98	0.917	0.876
		Q22	0.887			
		Q23	0.909			
		Q24	0.901			
	Intention to Use	Q25	0.837	0.715	0.883	0.799
		Q26	0.868			
		Q27	0.831			

Validation of Model

Before testing Structural Equation Analysis, the proposed study model must be validated by a set of indicators to check the suitability of the model of this study. The results in Table 4, showed that the value of chi-square/degree of freedom ($\chi2/df$)=4.477 which is less than the recommended value=5. The Adjusted Goodness of Fit Index (AGFI)=0.905 which is more than recommended value>0.8. Also, Root Mean Square Error Of Approximation (RMSEA)=0.091 which is less than recommended value ≤ 0.10. Moreover, Normed Fit Index (NFI)=0.96, Comparative Fit Index (CFI)=0.968 and Goodness of Fit Index (GFI)=0.964 were all met the standards that must all be greater than 0.90. Thus, the Table 4 showed that above indicators have proved satisfactory for the study.

Table 4 VALUES OF GOODNESS OF FIT MODEL						
Indicator	**AGFI**	**χ2/df**	**GFI**	**RMSEA**	**CFI**	**NFI**
Recommended	>0.80	<5	>0.90	≤0.10	>0.90	>0.90
References	(Miles & Shevlin, 1998).	(Tabachnick & Fidell, 2007)	(Miles & Shevlin, 1998).	(Mac Calm et al, 1996)	(Hu & Bentler, 1999).	(Hu & Bentler, 1999).
Value of Model	0.905	4.477	0.964	0.091	0.968	0.96

Hypotheses Testing

Structural Equation Analysis is used to test the research hypothesis as shown in the Table 5 and Figure 2; the hypothesis will be accepted if p-value is less than 0.05:

Table 5 THE RESULTS OF TESTING HYPOTHESES								
			Total effect	**Indirect effect**	**Direct effect**	**T-value**	**P**	**Decision**
B	<---	ATT	0.767		0.767	9.801	***	accept
SAT	<---	ATT	0.829		0.829	9.978	***	accept
AP	<---	B	0.522		0.522	6.876	***	accept
AP	<---	SAT	0.459		0.459	4.621	***	accept
AP	<---	ATT	0.602	0.781	-0.179	-1.148	.251	reject
ITU	<---	B	0.333	0.205	0.129	1.505	.132	reject
ITU	<---	SAT	0.613	0.18	0.433	4.052	***	accept
ITU	<---	AP	0.392		0.392	7.564	***	accept
ITU	<---	ATT	0.542	0.694	-0.152	-.954	.340	reject

H1   Attitudes positively affect beliefs of personal protective equipment.

Above table shows that (T-value=9.801; P<0.05; =0.000). This means that attitudes positively affect beliefs of personal protective products.

H2   Attitudes positively affect actual practice of personal protective equipment.

Above table shows that (T-value=-1.148; P>0.05; =0.251). This means that attitudes have no effect on actual practice of personal protective products.

H3   Attitudes positively affect satisfaction of personal protective equipment.

Above table shows that (T-value=9.978; P<0.05; =0.000). This means that attitudes positively affect satisfaction of personal protective products.

H4   Attitudes positively affect intention to use of personal protective equipment.

Above table shows that (T-value=-0.954; P>0.05; =0.34). This means that attitudes have no effect on intention to use of personal protective products.

> *H5   Beliefs positively affect actual practice of personal protective equipment.*

Above table shows that (T-value=6.876; P< 0.05;=0.000). This means that beliefs positively affect actual practice of personal protective products.

> *H6   Satisfaction positively affects actual practice of personal protective equipment.*

Above table shows that (T-value=4.621; P<0.05; =0.000). This means that satisfaction positively affects actual practice of personal protective products.

> *H7   Beliefs positively affect intention to use of personal protective equipment.*

Above table shows that (T-value=1.505; P>0.05; =0.34). This means that beliefs have no effect on intention to use of personal protective products.

> *H8   Actual practice positively affects intention to use of personal protective equipment.*

Above table shows that (T-value=7.564; P<0.05; =0.000). This means that actual practice positively affects intention to use of personal protective products.

> *H9   Satisfaction positively affects intention to use of personal protective equipment.*

Above table shows that (T-value=4.052; P<0.05; =0.000). This means that satisfaction positively affects intention to use of personal protective products.

> *H10   Attitudes positively affect intention to use of personal protective equipment via beliefs.*

Above table shows that (Indirect effect=0.205; P>0.05; =0.129). This means attitudes have no effect on intention to use of personal protective products *via* beliefs.

> *H11   Attitudes positively affect intention to use of personal protective equipment via actual practice.*

Above table shows that (indirect effect=0.694; P>0.05; =0.34). This means attitudes have no effect on intention to use of personal protective products *via* actual practice

> *H12   Attitudes positively affect intention to use of personal protective equipment via satisfaction.*

Above table shows that (Indirect effect=0.18; P<0.05; =0.000). This means attitudes positively affect intention to use of personal protective products *via* satisfaction.

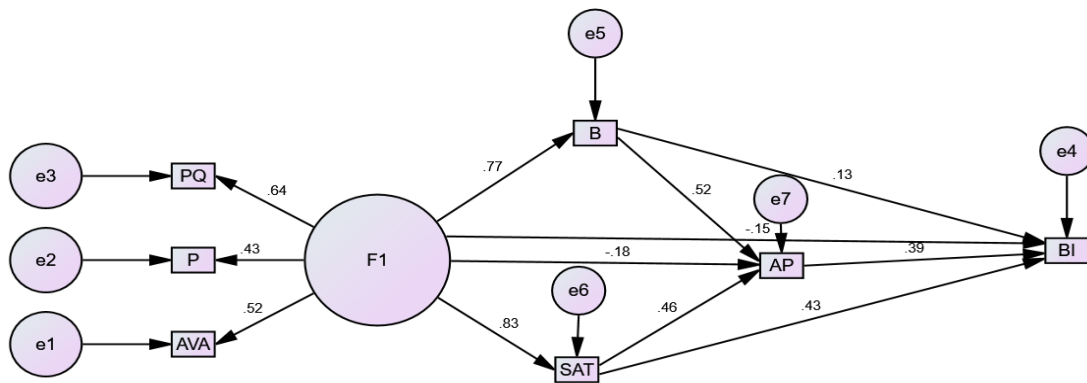Above results were concluding in the following Figure 2:

FIGURE 2
STRUCTURAL EQUATION MODEL

DISCUSSION

Current study aimed at evaluating attitudes, beliefs, satisfaction, actual practice and intention of use for personal protective equipment during the Covid-19 pandemic in relation to variables including (product quality, price and availability). Through uploading and distributing a self-administered questionnaire on (421) customers; results of study indicated the following:

- Customers' attitudes positively affect beliefs and satisfaction but have no effect on actual practice and intention to use.
- Beliefs were found to be influential in a positive way on actual practice but have no positive effect on intention to use.
- Satisfaction was found to be positively influential on actual practice and intention to use
- There is a positive relationship between actual practice and intention to use.

PPE have proven its worth in reducing the risks of infection during the Covid-19 pandemic and increasing the level of safety for individuals through their commitment to wearing protective equipment and ensuring its presence in the daily activities they perform.

The current study was able, by relying on the data collected from the sample members and analyzing them statistically, to arrive at the main idea that attitudes, beliefs, satisfaction, actual practice and intention to use differ and are affected between individuals regarding the use of protective tools during the period of the pandemic. Covid-19, and as is evident through the analysis, the individual's attitude positively affects their beliefs an satisfaction for the use of protective devices such as face masks and medical gloves whereas the attitudes have nothing to do with the actual practice or intention to use due to the fact that the use of these tools may It does not come from the individual, but it may come from laws imposed on individuals that require them not to mix or avoid gatherings, or even wear protective masks and medical gloves in order to avoid infection. In other words, individuals may have a negative attitude towards going to the mall and wandering the markets wearing a face mask, since it is considered uncomfortable to breathe, especially during summer periods and high heat, but they are forced to do so under the weight of legal accountability, and this is what agrees with Panovska-Griffiths, et al., (2020); Fadil, et al., (2020) & Hussain, et al., (2020) who indicated that many individuals have a negative attitude towards the use of PPE, but that they are forced to do so based on the laws imposed on them by the state.

On the other hand, the study found, based on the above analysis, that beliefs positively affect actual practice did not have an effect or positive relationship with intention to use, in other words, individuals' opinions and their beliefs may have an impact in pushing them towards using. PPE

while moving from one place to another, and this belief stems from their internal individual convictions that they thus protect themselves from catching the infection and spreading it in their homes among their family members, but still, these beliefs are unable to positively influence intention to use relying on the idea that the use of protective products such as PPE is not an asset in individuals' lives. The individual is accustomed to navigating from one place to another without the need to use face masks or gloves. He is also accustomed to being close to others and dealing with them from close distances and not avoiding touching them or approaching them, and therefore it can be said - as indicated by Picard, et al., (2020); Alao, et al., (2020) & Huynh (2020)-that departing from the original is independent of intention to use except that based on the facts and facts before the individual, they may be related to actual use.

The issue of satisfaction-according to the analysis of the study-was found to be a matter of relativity, as the satisfaction of the individuals intended in the current study did not refer to their satisfaction with the idea of using PPE, but rather it indicates the extent of their satisfaction with the PPE themselves in terms of quality, comfort and price. It is this that will change their attitudes towards the notion of use. According to the study, a conclusion was reached that the quality of the product, its price and availability in the market have a significant impact on the satisfaction of individuals using PPE and continue to do so until the end of the pandemic, and this is in agreement with both Simpson & Sandrin (2021) & Handayani, et al., (2020). In general, the main hypothesis was accepted, which indicated a positive relationship between intention to use and actual practices that stemmed from individuals' conviction, agreement and satisfaction with the use of PPE in order to protect themselves and their families from contracting an infection that could change their lives forever.

CONCLUSION AND RECOMMENDATIONS

Even with the application of the best procedures/controls to control the spread of the Covid-19, there is no doubt that some risks to the safety and health of individuals will remain as long as the virus still exists, and these risks are the individuals that can protect and protect against. Therefore, the study proved that all authorities must develop and implement programs to manage the risk of spreading the virus that are compatible with the requirements of protection, the most important of which are personal protection equipment. Even in the event that the best control mechanisms are applied, some dangers can continue to pose a risk to the health and safety of individuals in the event that commitment does not emanate from them personally in addition to checking the idea of rumors circulating on social media platforms, which sometimes diminish the importance of preventive equipment in protection against the virus and stresses the idea of herd immunity, which has proven unsuccessful in many countries.

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