Original Article

Psychiatric Aspects of Stock Market in Egypt

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Background: In spite of growing population participating in stock market activities and the effect of these activities on psychological condition on one side and the effect of cognitive processing and emotional responses on decision making on the other side, mental health professions in Arab World did not give sufficient attention to that subject.
Objectives: to assess the effect of dealing with stock market on physical, psychological, social and occupational conditions of the client from their own point of view, and the effect of psychological profile on decision making process.
Subjects and Methods: Stock Market Participants' Questionnaire was distributed on those clients attending Stock Market Conference held in Cairo at 11/5/2006. Of them 99 persons completed the Questionnaire which consists of demographic data of the participant in addition to 21 questions inquiring about the effect of dealing with stock market on different aspects of health, social relations and occupational performance.
Results: Males were more prevalent than females (81%:19%), the main age group was 25-34 years (42%). Sixty three per cent of participants indicated that they suffered severe anxiety when they have been exposed to losses. 57% also suffered anxiety when they got unexpected benefits. 60% of subjects said that dealing with stock marked affected their general heath negatively, 45% suffered psychological troubles, 89% suffered physical problems, 100% faced family problems, health troubles and disturbed sleep at times of sudden loss or gain. Regarding the commercial behavioral pattern and decision-making, 83% indicated that their decisions were affected by their psychological conditions. 53% used to depend on their internal feeling to decide. 53% were affected by optimism and pessimism, 53% were affected by opinions of others, 61% avoided taking risk, 54% were always hesitant to make decisions, 53% realized that their hesitancy, deprived them from great chances. Interestingly 89% of participants do not like their children to be involved in stock market activities depending on their negative experiences.
Conclusion: Dealing with stock market in the present conditions represents a burden on physical, psychological and familial conditions of those clients which in turn affects significantly their decision making process. It is recommended to give more attention to such population and to arrange for education and training workshops helping them to deal with the stock market in a healthy manner.

Keywords: Stock market, Psychiatry, Economic, Behavior, Business.

Abbreviations:
Dept.: Department
No: Number
U S: United States
U K: United Kingdome

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INTRODUCTION

When Investors' fund or stock options fall in value, they may become overly anxious or even depressed, with the result that both their business and personal life suffers (Moses, 2002). Psychology has a great influence on stock market, and Princeton University Psychology Professor Daniel Kahneman, won a Nobel Prize for Economics in 2002 for his work merging psychology and economics. Investors are people and like most people react emotionally to news and other facts, and a person's perception of fundamental and technical factors can be influenced by many things including money (Abika.com 2006).

It is important to remember that rises and falls in stock market are usually temporary. Historically even severe downturns in stock values have turned around, with the result that the market again hits new highs (Moses, 2002). Research in behavioral finance shows that people are generally emotional, biased, irrational, overly impressed with their acumen and what they believe to be familiar to them, and this behavior practiced in mass tends to create bubbles and seasonal swings (Abika.com 2006).

Prospect theory investors evaluate their choices in terms of the potential gains and losses relative to some reference point while standard investors focus only on the net cash flow. Moreover, while standard investors are always risk-averse , prospect theory investors have an S-shaped value function over gains and losses which displays concavity (Risk-aversion) in the domain of gains and convexity (Risk-seeking) in the domain of losses (Binnewies, 1992).

Many experiments were done on stock market investors and suggested that the framing of alternatives exerts a crucial effect on the choices of many investors. Equally important is the observation that people are not always aware of the frames that influence their choices (Fischhoff, 1983; Kahneman and Tversky, 1992).

SUBJECTS AND METHODS

Stock Market Participants' Questionnaire (Prepared by Dalia Elshemi–psychologist) was distributed on those clients attending Stock Market Conference held in Cairo at 11.5.2006, of them 99 persons completed the Questionnaire which consists of 5 questions covering the demographic data of the participant in addition to 21 questions inquiring about the effect of dealing with stock market on different aspects of health, family relations, social relations, decision making, occupational performance in addition to belief in pessimism and optimism.

RESULTS

In regard to demographic data of our sample 81% of stock market investors are males and 19% are females, and 48% are married while 46% are single. The mean age group was 25-34 years in 42% of the sample followed by the age group 15-21 years which represented 21% (Table 1, figure 1).

Table 1: Demographic data of studied individuals:

Variable	No	Percent
Gender:		
♀	18	19.2%
♂	81	81.8%
Age range:		
15-24	21	21.2%
25-34	42	42.4%
35- 44	10	10.1%
45-54	16	16.2%
55 - 64	10	10.1%
Marital status:		
Married	48	48.4%
Unmarried	46	46.4%
Didn't answer	5	5.1%
Total	99	100%

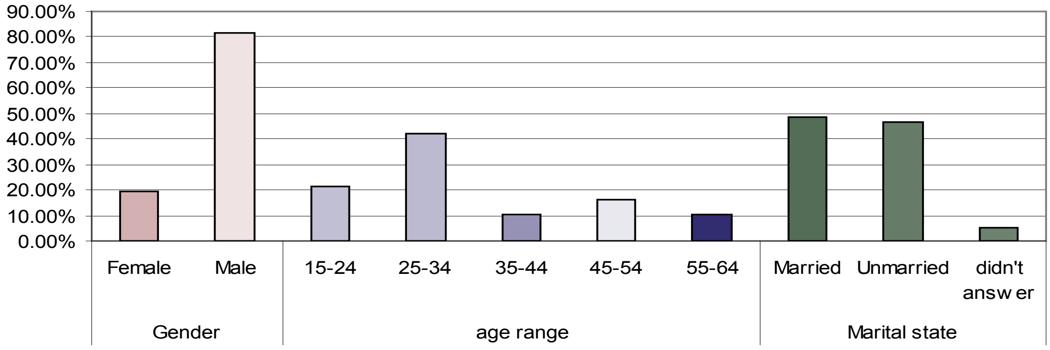

Fig.1: Demographic data of studied individuals.

Feelings of severe anxiety when exposed to massive losses were reported in 63% while 57% suffered anxiety following unexpected profits. Sixty eight percent of the studied sample claimed that individuals who are not dealing in the stock market are leading more stable lives than those who do while, 32% did not agree with this perspective. Traders claimed that the stock market negatively affected their family life in 68% of our sample while 32% said it had no effect. In 60% of investors, dealing negatively affected their general heath. Psychological condition of investors changed with the changing stock market in 54% of the studied group (Figure 2).

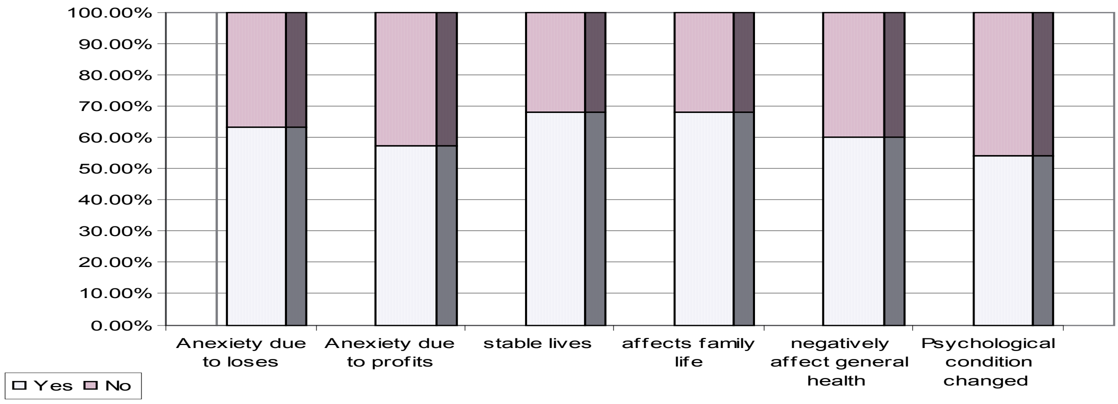

Fig. 2: Effects of stock market on the studied cases.

Regarding the commercial behavioral pattern and decision-making 83% indicated that decisions they made were affected by their psychological condition. Around 53% depend on their internal feelings in decision-making. Optimism and pessimism affected 53% of stock market investors while, 53% were affected by opinions of others (Figure 3).

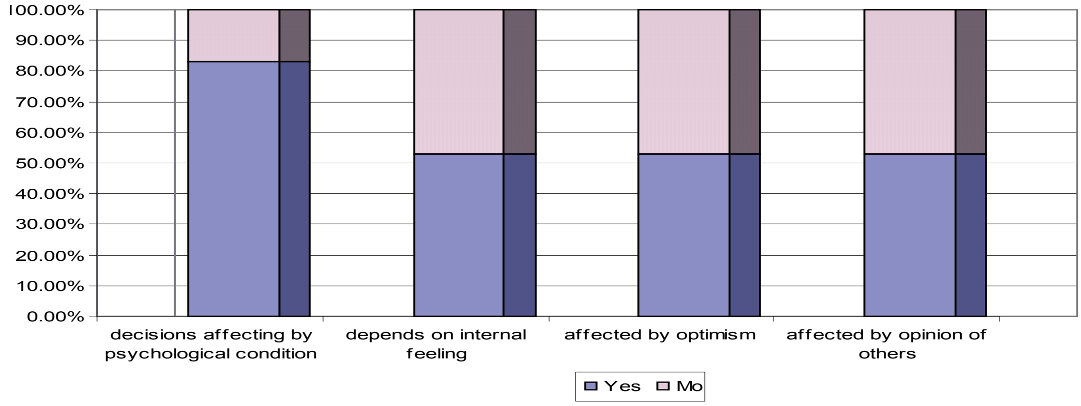

Fig.3: Commercial behavior pattern and factors affecting decision-making.

Regarding risk-taking behavior 61% avoided risk taking and dealt only in areas that they felt confident in. In the sample tested 54% were always hesitant to make decisions although, 53% realized that their hesitancy, deprived them from great chances. Time spent thinking before getting involved in a new deal after gaining profits as well as after losses was considered long in 73% of traders (Figure 4).

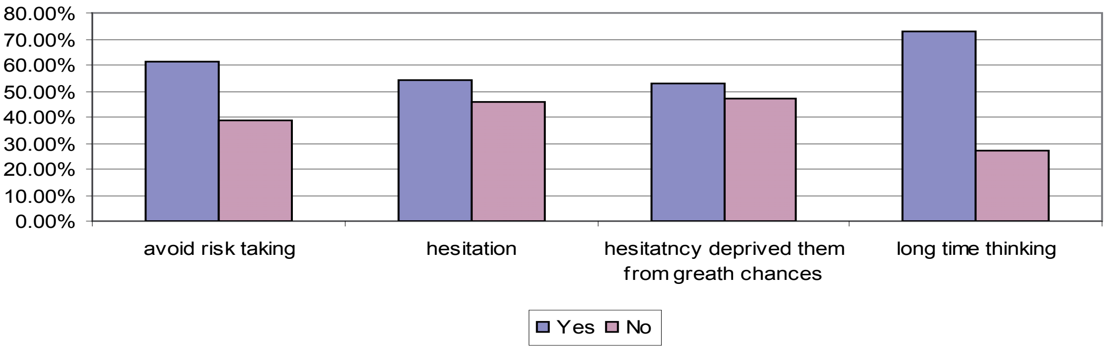

Fig. 4: Risk taking behavior in studied cases.

Seventy nine percent of dealers felt that stock market dealings affect their ability to work and how they behaved with others. Seventy three percent of dealers considered themselves unlucky. In addition, the general health of 89% was getting worst because of their stock market involvements. Interestingly 89% of participants do not want their children to be involved in stock market activities depending on their negative experiences (Figure 5).

Fig. 5: Response of participants to stock market events.

A striking 100% faced family problems and health troubles because of the stock markets sudden losses or profits. It was claimed that 97% suffer from disturbed sleep at times of sudden loss or gain. After suffering losses, 84% reported feelings of being down and hopes of starting over. After suffering losses, 97%

of losing traders start buying & selling without giving their actions much thought. Ninety-six percent report that the feelings of happiness after a big profit are of moderate intensity. Investors try to lower averages and stop losses at some point in 90% of cases (Figure 6).

Fig. 6: Different reactions of participants to stock market events.

DISCUSSION

This study reflected male predominance (81% of stock market investors), and this is expected in Egyptian society where females are still far from involvement in relatively recent adventiourous financial activities like stock market.

In US, half of all money managers are females, yet many women still believe that investing is something men do. With most women, the first problem is a feeling of incompetence. About 10 years ago, men and women were surveyed about their confidence in investing. Across all cultural groups, about 80 percent of men were confident, but only 29 percent of women were. This lack of confidence has to be dealt with through education and support. In fact, women money managers can be superior investors because they have a lot more intuition than men and an ability to integrate a greater set of information about companies (Schot and Arbeiter, 1997).

In the same context, we can understand the predominance of young age groups (42% aged 25-34 years and 21% aged 15-21 years). Older people may have some anxiety toward stock market as a new unexpected way of investment, and accordingly may prefere other more stable, easily expected and traditional ways of investment.

In recent years, more people have jumped into the stock market than at any other period in history. Eighty-seven percent of the money ever invested in the U.S. stock market has come in since late 1990. We have entered the age of financial autonomy, an exciting period, but one fraught with anxiety as well as promise (Schott and Jean, 1998).

As a new fluctuating way of trading 63 % of the sample, suffered anxiety when exposed to massive losses, but surprisingly 57% of the sample also suffered anxiety following unexpected profits. This means that the fluctuations itself lies behind anxiety whatever loss or gain, and this made 68% of the sample to claim that individuals who are not dealing in the stock market are leading more stable lives; 60% to feel negative effects on their general health and their family lives and 54% to feel psychological changes with the fluctuating market.

Some people are avid and hardworking investors, yet they make themselves miserable because they are always anxious. They worry when their stocks and mutual funds go up, they castigate themselves when stocks go down, and they feel that every market decision they make has to be the “Right” one. However, worrying can sink a stock portfolio; its obsessive nature can cause investors to sell when it is against their best financial interest (Schott and Arbeiter, 1997).

It seems that the members involved in the study are suffering negative effects on their general health, psychological condition, and family life; accordingly, we can expect their decision-making processes to be affected greatly by these factors.

Much of economic and financial theory is based on the notion that individuals act rationally and consider all available information in the decision-making process. However, researchers have uncovered a surprisingly large amount of evidence that this is frequently not the case. Evidence reveals repeated patterns of irrationality, inconsistency, and incompetence in the ways human beings arrive at decisions and choices when faced with uncertainty (Bernstein, 1998).

Eighty three per cent of the present sample indicated that decisions they made were affected by their psychological condition, and about 53% depend on their internal feelings, and are affected by optimism, pessimism and the opinions of others in decision-making.

In order to become more confident in stock market environment, ordinary investors must be self-aware as well as self-directed. In addition, we need to recognize that excessive emotions can cause us trouble. Fortunately, there is a host of things we can do to distance ourselves from counter-productive feelings when making investment decisions.

When we know that we are able to control our own self-defeating behaviors, we approach the market with a sense of comfort and we increase our success. Many risk-averse investors think they need a great deal of handholding from their broker or investment adviser, and even their friends. While this helps up to a point, it is best for certainty-seekers to make the basic choices for their stock portfolio independently, in order to foster independence and to convince themselves that their choices are "Good enough" (Schott and Arbeiter, 1997).

The most important characteristic of outstanding traders appears to be low emotional reactivity during periods of market turbulence: "Stability during volatility" (Lo and Repin, 2002). In one study, Andrew Lo and Dmitry Repin used psychophysiological equipment to measure heart rate, blood pressure, and skin conductance while traders performed real-time trading. They found that more experienced traders had less physiological reactivity to information surprises (Lo and Repin, 2002).

Most of us assume that traders do best if they adjust their trading style to match their personality. Moreover, this is true as a good first guess; however, there are some tantalizing findings of personality traits that predispose traders to success. O'Creevy, et al. (2004), who studied 118 professional traders for European investment banks, found that successful traders tend to be emotionally stable introverts who are open to new experiences.

In the tested sample, 61% avoided risk taking behavior and dealt only in areas that they felt confident. On the other hand, 54% were always hesitant to make decisions, although 53% realized that their hesitancy deprived them from great chances. Hesitancy proved to increase after gains and losses and the time spent thinking before getting involved in a new deal after gaining profits as well as after losses was considered long in 73% of traders.

Oberlechner, (2004) reports that a "Tackling attitude" is necessary for trader success. Kahn and Cooper, (1996) report that decisiveness is essential for traders, regardless of the stressors they are facing on or off the trading floors.

After suffering losses 97% of losing traders start buying and selling without giving their actions much thought i.e. their thinking is not working properly and they decide on emotional basis. On the other hand, 96% report that the feelings of happiness after a big profit are of moderate intensity.

Self-discipline relates to how we manage our impulses. Self-disciplined people are better able to control and channel their impulses towards goals. Self-discipline is a facet of conscientious-ness. Oberlechner (2004) mailed a survey form to 600 professional foreign exchange traders in Europe and the UK, 54% of the survey forms were returned. Each survey form asked traders to rank the most important characteristics of successful traders out of a list of 23. Of the individual items, the most highly ranked were (1) quick reaction time, (2) discipline, (3) experience, (4) concentration, and (5) stress resistance. Out of eight "factors" he derived from sub-groupings of the 23 characteristics, "Disciplined cooperation" was ranked most highly.

Biais, et al. (2001) found that subjects who scored high on a measure of impulsivity (The opposite of self-discipline) placed more trades, without improving performance.

Other researchers have found that the illusion of control among experimental trading subjects led to underperformance relative to others (O'Creevy, et al. 1998). Over-confidence refers to a mis-appraisal of one's foresight, talent, and abilities as being better than they really are. Overconfident traders tend to trade too frequently and tend to ignore danger signs regarding their positions. Biais, et al. (2001) found that overconfidence is correlated with sub-par performance among experimental subjects in a trading environment. In a famous study, Terrence and Brad, (1998) analyzed 10,000 brokerage accounts at Schwab. They found that overconfident investors tend to sell their winning stocks too early and stay in underperforming stocks too long, leading to 3.5% annual under-performance of the market. The actual nature of overconfidence is still debated.

Behavioral Economics is the combination of psychology and economics that investigates what happens in markets in which some of the agents display human limitations and complications (Mullainathan and Thaler, 2000).

Herbert, (1955) was an early critic of modeling economic agents as having unlimited information processing capabilities. He suggested the term "Bounded rationality" to describe a more realistic conception of human problem solving capabilities. As stressed by Conlisk, (1996), the failure to incorporate bounded rationality into economic models is just bad economics-the equivalent to presuming the existence of a free lunch. As shown by Kahneman and Tversky, (1974), this oversight can be important since sensible heuristics can lead to systematic errors. Departures from rationality emerge both in judgments (Beliefs) and in choice. The ways in which judgment diverges from rationality is long and extensive. Many of the departures from rational choice are captured by prospect theory (Kahneman and Tversky, 1979), a purely descriptive theory of how people make choices under uncertainty. Prospect theory is an excellent example of a behavioral economic theory in that its key theoretical components incorporate important features of psychology. To fully describe choices prospect theory often needs to be combined with an understanding of "Mental accounting" (Thaler, 1985).

CONCLUSION

Dealing with stock market is a new type of business in Egypt which attract increasing numbers of younger and adventurous business men and to less extent women. Fluctuations are integral aspects of stock market which affect general health, psychological condition, occupational and familial stability of those working in such type of business. Economic education, psychiatric evaluation, management of psychological problems, rehabilitation and support programs, all are needed for people dealing with stock market especially at times of crises.

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RECOMMENDATIONS

- **It is important to review and assimilate the basic concepts of dealing with stock market as follow:**

1. It is always needed to remind investors about the inherent up-and-down nature of the stock market.
2. Reassure them that losses are almost always temporary.
3. They should be aware that they are in these investments for the long haul, and that over a period of time their investments will accrue in value.
4. Instead of thinking "Safety," certainty-seeking investors need to think about "Spreading out the risk" investing in a variety of stocks, funds, or bonds, so that if any single investment does poorly, the rest of the portfolio will shoulder the burden of financial growth. It is also important for these investors to learn to act as independently as possible.

- **Psychological evaluation must be available and recommended for vulnerable persons or persons in obvious stress:**

1. Clinical evaluation with or without psychometric assessment could be used.
2. Techniques such as psycho-physiological measurement can be used to assess emotional reactivity. Reactivity can be measured via changes in skin conductance during periods of surprise or stress. Additionally, it appears that fMRI brain imaging can be used to assess emotional reactivity in the brain's limbic system.

- **Psychosocial support especially at times of stresses, this could be done through one or more of the following:**

1. Good familial and social network.
2. Availability of psychological counseling especially oriented to stock market problems.
3. Individual therapy sessions, usually of supportive nature.
4. Self help groups involving stock market investors.

- **On line support through a web site specialized in psychological support for stok market dealers.**

- **Training courses could be done (On and/or of-line) for how to deal with the psychological effects of stock market fluctuations and events.**

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الملخص العربى

الجوانب النفسية للمتعاملين مع البورصة فى مصر

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الخلفية: على الرغم من تزايد عدد المشاركين فى أنشطة البورصة وأثر هذه الأنشطة على الحالة النفسية من جهة وأثرها على المعالجة المعرفية والاستجابات الإنفعالية المؤثرة فى صنع القرار على الجانب الآخر، فإن العاملين فى مجال الصحة النفسية في العالم العربى لم يعطوا الاهتمام الكافى لذلك الموضوع.

الأهداف الإجرائية: وقد صممت هذه الدراسة لإستجلاء أثر التعامل فى البورصة على الحالة البدنية والنفسية والاجتماعية والمهنية للعميل من وجهة نظره الخاصة، وتأثير الصورة النفسية على عملية صنع القرار.

المشاركون والطريقة: وقد وزع استبيان "المشاركين فى البورصة" على العملاء الذين حضروا مؤتمر البورصة الذى إنعقد فى القاهرة فى ٢٠٠٦/٥/١١. وقد أكمل ٩٩ مشاركًا الاستبيان الذى يتألف من البيانات الديموغرافية للمشارك بالإضافة إلى ٢١ سؤالاً تستفسر عن أثر التعامل فى البورصة على مختلف جوانب الصحة، والعلاقات الاجتماعية والأداء المهنى.

النتائج: وأوضحت نتائج الدراسة زيادة عدد الذكور (٨١٪) مقارنة بالإناث (١٩٪)، وكانت الفئة العمرية الرئيسية هى ما بين ٢٥ إلى ٣٤ عاماً (٤٢٪). وقد أشار ثلاثة وستون فى المائة من المشاركين إلى أنهم عانوا من قلق حاد عندما تعرضوا لخسائر، بينما أعرب ٥٧٪ من المشاركين أنهم عانوا من القلق عندما حققوا فوائد غير متوقعة. وأعرب ٦٠٪ من أفراد العينة عن أن التعامل فى البورصة أثر بالسلب على صحتهم ، وقد عانى ٤٥٪ من مشاكل نفسية، و٨٩٪ من مشاكل بدنية، وواجه كل المشاركين فى الدراسة (١٠٠٪) مشاكل عائلية، ومشاكل صحية ومشاكل تتعلق بالنوم فى أوقات الربح أو الخسارة المفاجئة.

أما بالنسبة لنمط السلوك التجارى وإتخاذ القرار، فقد أشار ٨٣٪ من المشاركين أن قراراتهم تأثرت بحالاتهم النفسية، بينما اعتمد ٥٣٪ على الشعور الداخلى فى إتخاذ القرار. وتأثر ٥٣٪ من المشاركين بحالات التفاؤل والتشاؤم، بينما تأثر ٥٣٪ بالآخرين فى إتخاذ القرار، وأعرب ٦١٪ عن أنهم لا يغامرون، وأخيرًا فإن ٥٤٪ من المشاركين كان لديهم تردد فى إتخاذ القرار، وصرحوا بأن هذا التردد حرمهم من فرص عظيمة.

وقد أسفرت نتائج الدراسة عن أن ٨٩٪ من المشاركين فيها لا يحبون أن يتعامل أولادهم فى البورصة نتيجة للخبرات السلبية التى مروا بها .

الخلاصة والتوصيات: وتخلص الدراسة إلى أن التعامل مع البورصة فى الظروف الحالية يمثل عبئاً على الصحة البدنية والنفسية والظروف الأسرية لهؤلاء العملاء والتى بدورها تؤثر بشكل كبير على عملية صنع القرار.

وتوصى الدراسة بإعطاء المزيد من الإهتمام للمتعاملين فى البورصة وتنظيم حلقات تعليمية وورش عمل لمساعدتهم على التعامل بطريقة صحية .