



NYSE: Emotional Control Sharing Trading Psychology

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Authors' contributions

This work was carried out in collaboration between both authors. Author AAS designed the study, performed the statistical analysis, wrote the protocol and first draft of the manuscript. Author SPW managed the analyses of the study and literature searches. Both authors read and approved the final manuscript.

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ABSTRACT

A real-world problem in stock markets is always the emotional control. Obviously, the real question is how to "control" the bad emotions and feelings (e.g. fear and greed), just before the execution orders, rather than to "eliminate" them. In order to address the emotional control problem, this article introduces the innovative concept "*Emotional Control Sharing Trading Psychology, ECSTP*", which has been defined as a collaborative trading engineering term. Then, an empirically-tested approach (statistical analysis) is performed in order to initially evaluate the proposed term in real-world NYSE trading strategies as far as the returns are concern. The evaluation result shows an up to 29% improve in returns after the adoption of the proposed term. The implications of the proposed trading approach are pointed to better and more stable decisions with the cost of groupware coordination and communication problems. Always, a well designed and organized collaborative intervention improves groupware efficiency and effectiveness for investment decisions.

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1. INTRODUCTION

Always in trading and particularly in trading psychology, the so called *bad emotions* (e.g. fear and greed) resulted in undocumented “buy” and “sell” orders and eventually in trading losses. The “*bad emotions*” problem has been described in financial literature [1-4]. In this field, timing the market trading activities is always a difficult function [5,6]. Also, in trading, a number of chaotic functions with unpredictable functionalities is involved, like determinants and price changes [7], market trends and financial crises [8], market volatility and leveraged ETFs [9], temporal changing climatic conditions [10], triggering orders in trading [11], etc.

But, despite the fact that in financial literature trading tactics were fully investigated [12-19], the “*sharing trading psychology*” topic is still an undocumented term. Also, “*emotional control*” in a sharing environment is a challenge for investigation, research and documentation. Obviously, the merging of the “*sharing trading psychology*” topic with the “*emotional control*” in a sharing environment challenging should produce a *trading dynamic psychology*, still undocumented so far.

The purpose of this article is to approach the above merging using empirically-tested data provided by Barron’s [20]. It must be emphasized that, as far as the current paper is concern, it is just an approach and not a well-documented methodology [21-26].

The rest of the article is organized as follows: Section 2 (“*Emotional Control Sharing Trading Psychology*”) the new concept is introduced and projected in time to become a temporal term; Section 3 (“*Empirically-tested Functionality*”) validates the introduced temporal term and discuss its performance; Finally, Section 4 (“*Conclusions*”) summarizes paper’s innovations and contributions.

2. METHODOLOGY

The methodology used in this article is based on the innovative concept “*Emotional Control Sharing Trading Psychology, ECSTP*”. The introduced concept *ECSTP*, actually, is referred to as a collaborative trading engineering term

which tries to address joint (combining) trading dynamic psychology functionality as a preliminary solution to the well-known “*bad emotions*” problem in trading decisions. References and theory approaches to group productivity and collaboration engineering applications with sustained success are well described by Briggs et al. in [27-29], but none of these antecedents is covering the psychology dimension and particularly the trading psychology in dynamic trading market situations.

The *ECSTP* term is defined as a collaborative procedure between trusted traders and investors in sharing their ideas, opinions, and initiatives just before the final execution order (“triggering”) in trading [8,9]. That is to say, if this procedure is adopted, then the executive part in trading decisions (the so-called “triggering” procedure) is implemented only after a sharing trading psychology meeting is executed first and an implicit, clear, and concise trading tactic is adopted.

Always in collaboration activities, one of the critical concerns is the number of the group members, with coordination and communication issues involved in the relative discussions [30]. More participants mean more efficiency in decision making but with the cost of a significant effort for group cooperative management [31]. In the proposed approach, the number of the members of this meeting should be a number greater than 3 (to enhance statistically the reliability of the decision and reduce the possibility of an error while keeping the groupware functionality) and less than 10 (in order the meeting to be functional and executive as much as possible in a very short time period).

According to statistic and psychology theory, the collaborative decisions beat individual ones in terms of correct answers in multi-choice environments and in dramatic dynamic situations (on-panic decisions). All the members of this collaborative procedure must be dedicated and validated (in morality, trustiness, discretion, etc.). These could be the certified traders of a financial institution/company or the individual members of subscribed e-trading rooms, recently appearing in USA [22,25].

The proposed collaborative engineering term ECSTP, in the case of projection in time, becomes a temporal function in simple (e.g. "Buy/Sell immediately on Market open at 09:30 am EST") or conditional trading functionalities (e.g. "If the Price Action at 11:00 is above the detected morning local high, issue a BUY order").

The introduced concept is viable because [27,31]:

- i. The "Build Consensus" pattern of collaboration sustainability ("In the process of the time, groups move from having more disagreement to having less disagreement on meetings for trading strategies") applies to the proposed procedure;
- ii. The "Evaluate" pattern of collaboration sustainability ("In the process of the time, groups move from less to more understanding of the simple or conditional trading functionalities toward goal/profit on meetings for trading strategies") applies to the proposed procedure; and
- iii. The "Organize" pattern of collaboration sustainability ("In the process of the time, groups move from less to more understanding of the relationship among group's internal structure") applies to the proposed procedure.

Finally, the simple or conditional trading functionalities are worthwhile according to many examples related to a number of investment decision cases, as they described by Dean et al. in [31]. For more information and literature review for collaborative engineering and collaborative trading engineering as well, please find articles in the specialized journal [32].

3. EMPIRICALLY-TESTED FUNCTIONALITY

The statistics for the proposed ECSTP function are presented in the following Table 1, which displays the summary numbers and statistical indicators of both "Individual Trading" and "Cooperative ECSTP Trading" trading from 1st January 2016 to 31st December 2017 (1105 trades in both cases). For comparative reasons, the "Individual Trading" was carry out in Melbourne, Australia under the supervision of the second paper's author; and at the same time the proposed "Cooperative ECSTP Trading" was

carried out in Thessaloniki, Greece and Maastricht, Netherlands under the supervision of the first paper's author.

All the primitive data for Table 1 were obtained from Barron's, a low-cost financial data provider (<https://www.barrons.com>).

Where,

Simple – A non-Conditional (Price Action) Buy/Sell order and without any timing influence (i.e. random time orders).

PA Conditional – A Price Action Conditional Buy/Sell order but without any timing influence (i.e. an order depending from the Price Action chart's critical points; e.g. morning session's local high/low).

Simple Temporal – A non-Conditional (Price Action) Buy/Sell order and with timing influence (i.e. orders at specific times; e.g. Buy on opening at 09:30 am EST, Sell on closing at 04:00 pm EST).

PA Conditional Temporal – A Price Action Conditional Buy/Sell order and with timing influence (e.g. Buy on closing at 04:00 pm EST if the PA is above the daily-mean PA high).

Return - The trade return measured in US Dollars (\$).

Difference - The difference in *Mean Returns* between "Individual Trading" and "Cooperative ECSTP Trading".

3.1 Discussion

The Table 1 statistical figures suggest that the incorporation of the proposed ECSTP cooperative trading function increases trade returns by 23% to 29%. The percentage depends from both, the PA conditional trading and the temporal trading. The biggest difference (29%) is achieved if the ECSTP function is operated with a PA conditional temporal functionality (e.g. Buy on closing at 04:00 pm EST if the PA is above the daily-mean PA high and Sell next morning on opening at 09:30 am EST) [26]. Also, the Standard Deviation numbers of the proposed ECSTP trading are always lower than the Individual trading implying a bit more sustainable results.

Table 1. Sample ECSTP statistics (trading returns)

	Individual trading				Cooperative ECSTP trading			Differences	
	Trades	Mean return (%)	Median return	St. dev.	Trades	Mean return (%)	Median return	St. dev.	Differences in mean (%)
A. Shareholding Dynamics Data									
Simple	1105	4.54	4.54	1.92	1105	5.58	4.87	1.85	23%*
PA Conditional	1105	10.50	0.35	1.44	1105	13.13	0.04	1.37	25%**
Simple Temporal	1105	14.54	4.54	1.92	1105	18.32	4.87	1.75	26%*
PA Conditional Temporal	1105	20.50	0.35	1.21	1105	26.45	25.83	1.07	29%**

**Changes significantly different from zero at 3% level, **Changes significantly different from zero at 1% level*

4. CONCLUSIONS

The current article has presented a groupware methodology for collaborative trading engineering and investment decisions and it is more appropriate for financial institutions trading at the NYSE. The evaluation result of the proposed approach shows an up to 29% improvement in returns after the adoption of the proposed approach. The implications of the proposed trading methodology are pointed to better and more stable decisions with the cost of groupware coordination and communication problems, but always a well designed and organized collaborative intervention improves groupware efficiency and effectiveness for investment decisions.

As an empirically-tested approach rather than a well-defined methodology (a possible future extension of the presented research), the described work is based on the innovation concept "*Emotional Control Sharing Trading Psychology*" which tries to address the *trading dynamic psychology* as a preliminary solution to the "*bad emotions*" trading problem. The proposed approach was defined in this article as a collaborative procedure between traders and investors in sharing their ideas, opinions, and initiatives just before the final order. In other words, the executive part in trading is triggered only after a well-organized sharing trading psychology meeting and a commonly accepted tactic. The members of this collaborative procedure could be the traders of a financial company or the individual members of virtual trading rooms.

The presented approach is most likely to be successful when team goals are clear, the project champion supports the collaborative trading engineering procedure, and there is always a sufficient budget to design, implement, and maintain the groupware trading functionalities.

NOTES

NYSE: New York Stock Exchange

Emotional Control: Emotional control is an active thought process or a commitment to a behavior to control your emotion, also known as a coping mechanism or emotion regulation or mood regulation.

Collaborative Trading Engineering: [Wikipedia] Collaborative engineering is defined by the International Journal of Collaborative Engineering as a discipline that "*studies the interactive process of engineering collaboration, whereby multiple interested stakeholders resolve conflicts, bargain for individual or collective advantages, agree upon courses of action, and/or attempt to craft joint outcomes which serve their mutual interests*" [32].

Collaborative trading engineering is quickly becoming a topic of great interest in recent years due to the explosion of internet technologies in trading.

Trading Psychology: [Investopedia] Trading psychology is referred to the emotions and mental state that dictate success or failure in trading securities. Trading psychology is important as knowledge, experience and skill in determining trading success. Discipline and risk-taking are two of the most critical aspects of trading psychology, since a trader's implementation of these aspects is critical to the success of his or her trading plan. While fear and greed are the two most commonly known emotions associated with trading psychology, other emotions that drive trading behavior are hope and regret.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Jensen MC. Agency cost of free cash flow, corporate finance, and takeovers. The American Economic Review. 1986;76:323–329. Available:<http://www.jstor.org/stable/1818789>
2. Basdekidou VA. IPO trading with short-term & intraday temporal functionalities. Business and Economics Journal. 2016;7(4):257. Available:<http://dx.doi.org/10.4172/2151-6219.1000257>
3. Basdekidou VA, Styliadou AA. Corporate social responsibility & market volatility: Relationship and trading opportunities. International Business Research. 2017; 10(5):1-12. Available:<http://dx.doi.org/10.5539/ibr.v10n5p1>

4. Edelen RM, Ince O, Kadlec GB. Institutional investors and stock return anomalies. E-Journal SSRN; 2015. Accessed 12 January 2018. Available:<http://dx.doi.org/10.2139/ssrn.2359744>
5. Hovakimian A, Hu H. Institutional Shareholders and SEO market timing. Journal of Corporate Finance. 2016;36:1-14. Available:<http://dx.doi.org/10.1016/j.jcorpfin.2015.09.009>
6. Baker M, Wurgler J. Market timing and capital structure. Journal of Finance. 2002; 57:1–32. Available:<http://dx.doi.org/10.1111/1540-6261.00414>
7. Pham T-A, Nguyen D-H, Dinh M-H. Determinants of the frequency of price changes in Vietnam. British Journal of Economics, Management & Trade. 2016;15(2):1–10. Available:<http://dx.doi.org/10.9734/BJEMT/2016/29561>
8. Basdekidou VA. Trends on the capital market in Greece before and after the state debt crisis. Journal of Economic Studies. 2015;24(1):66-89. Available:<https://www.cceeol.com/search/article-detail?id=281583>
9. Basdekidou VA, Styliadou AA. Corporate social responsibility performance & ETF historical market volatility. International Journal of Economics and Finance. 2017;9(10):30-39. Available:<http://dx.doi.org/10.5539/ijef.v9n10p30>
10. Larbi I, Gana AS, Nmadu JN, Okhimanhe AA, Bello GHM. Evaluation of root and tuber crops yield under the changing climatic conditions in Kwara State, Nigeria. Asian Journal of Economics, Business and Accounting. 2016;1(2):1–9. Available:<http://dx.doi.org/10.9734/AJEBA/2016/28441>
11. Alti A, Sulaeman J. When do high stock returns trigger equity issues? Journal of Financial Economics. 2012;103:61–87. Available:<http://dx.doi.org/10.1016/j.jfineco.2011.08.007>
12. Demiralp I, D'Mello R, Schlingemann FP, Subramaniam V. Are there monitoring benefits to institutional ownership? evidence from seasoned equity offerings. Journal of Corporate Finance. 2011;17:1340–1359. Available:<http://dx.doi.org/10.1016/j.jcorpfin.2011.07.002>
13. Ogden JP, Wu S. Reassessing the effect of growth options on leverage. Journal of Corporate Finance. 2013;23:182-195. Available:<http://dx.doi.org/10.1016/j.jcorpfin.2013.08.008>
14. Ulum I, Rizqiyah, Jati AW. Intellectual capital performance: A comparative study between financial and non-financial industry of Indonesian biggest companies. International Journal of Economics and Financial Issues. 2016;6(4):1436-1439. Available:<http://www.econjournals.com/index.php/ijefi/article/view/2884/pdf>
15. Hartzell JC, Starks LT. Institutional investors and executive compensation. Journal of Finance. 2003;58:2351–2374. Available:<http://dx.doi.org/10.1046/j.1540-6261.2003.00608.x>
16. Cesari AD, Espenlaub S, Khurshed A, Simkovic M. The effects of ownership and stock liquidity on the timing of repurchase transactions. Journal of Corporate Finance. 2012;18:1023-1050. Available:<http://dx.doi.org/10.1016/j.jcorpfin.2012.06.004>
17. Hao GQ. Institutional shareholder investment horizons and seasoned equity offerings. Financial Management. 2014;43: 87–111. Available:<http://dx.doi.org/10.1111/fima.12038>
18. Gibson S, Safieddine A, Sonti R. Smart investments by smart money: Evidence from seasoned equity offerings. Journal of Financial Economics. 2004;72:581–604. Available: <http://dx.doi.org/10.1016/j.jfineco.2003.05.001>
19. Chemmanur TJ, He S, Hu G. The role of institutional investors in seasoned equity offerings. Journal of Financial Economics. 2009;94:384–411. Available: <http://dx.doi.org/10.1016/j.jfineco.2008.12.011>
20. Barron's Market Data, 2016. Available: <http://www.barrons.com/data;> <http://www.wsj.com>
21. Yan X, Zhang Z. Institutional investors and equity returns: Are short-term institutions better informed? The Review of Financial Studies. 2009;22:893–924. Available:<http://dx.doi.org/10.1093/revfin/hhl046>

22. Rustam R. Analysis of the arguments presented in response to the allegations against an online education website. Asian Research Journal of Arts & Social Sciences. 2017;4(2):1-16. Available:<http://dx.doi.org/10.9734/ARJAS/S/2017/34974>
23. Kenanidis I, Papakitsos E. A decipherment of the eteocretan inscription from psychro (crete) 2017. Asian Research Journal of Arts & Social Sciences. 2017;4(3):1-10. Available:<http://dx.doi.org/10.9734/ARJAS/S/2017/36988>
24. Basdekidou VA. The momentum & trend-reversal as temporal market anomalies. International Journal of Economics and Finance. 2017;9(5):1-20. Available:<http://dx.doi.org/10.5539/ijef.v9n5p1>
25. Salahuddin M, Tisdell C, Burton L, Alam K. Social capital formation, internet usage and economic growth in Australia: Evidence from time series data. International Journal of Economics and Financial Issues. 2015;5(4):942-953. Available:<http://www.econjournals.com/index.php/ijefi/article/view/1494/pdf>
26. Basdekidou VA, Styliadou AA. Technical market anomalies: Leveraged ETF trading with daily and intraday temporal functionalities. Business and Economics Journal. 2017;8(1):1-5. Available:<http://dx.doi.org/10.4172/2151-6219.1000275>
27. Briggs RO, Vreede GJ-de, Nunamaker JF-Jr. Collaboration engineering with thinklets to pursue sustained success with group support systems. Journal of Management Information Systems. 2003;19(4):31-64. Available:<https://dl.acm.org/citation.cfm?id=1289768>
28. Briggs RO. The focus theory of group productivity and its application to development and testing of electronic group support systems. Doctoral Dissertation. University of Arizona; 1994. Available:<http://arizona.openrepository.com/arizona/handle/10150/186938>
29. Nunamaker JF-Jr, Briggs RO, Mittleman D, Vogel D, Balthazard P. Lessons from dozen years of group support systems research. Journal of Management Information Systems. 1997;13(3):163-207. Available:<http://www.jstor.org/stable/40398233>
30. Vreede GJ-de, Briggs RO. Collaboration engineering: Designing repeatable processes for high-value collaboration tasks. Proceedings of the 38th Hawaii International Conference on System Sciences (HICSS). IEEE Computer Society Press; 2005. Available:<http://dx.doi.org/10.1109/HICSS.2005.144>
31. Dean DL, Deokar A, Bush RT. Making the collaboration engineering investment decision. Proceedings of the 39th Hawaii International Conference on System Sciences (HICSS). IEEE Computer Society Press; 2006. Available:<http://dx.doi.org/10.1109/HICSS.2006.260>
32. Inderscience publishing / international journal of collaborative engineering, Genève, Switzerland. Available:<http://www.inderscience.com/browse/index.php?journalID=161>

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