

 Wiley Trading

ENHANCING TRADER PERFORMANCE



**proven strategies
from the cutting edge of
trading psychology**

BRETT N. STEENBARGER

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Enhancing Trader Performance

*Proven Strategies from
the Cutting Edge of
Trading Psychology*

BRETT N. STEENBARGER



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Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

Published simultaneously in Canada.

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Steenbarger, Brett N.

Enhancing trader performance : proven strategies from the cutting edge of trading psychology/Brett N. Steenbarger.

P. cm.—(Wiley trading series)

Includes bibliographical references.

ISBN-13: 978-0-470-03866-6 (cloth)

ISBN-10: 0-470-03866-7 (cloth)

1. Stocks—Psychological aspects. 2. Speculation—Psychological aspects.
3. Investments—Psychological aspects. 4. Stockbrokers—Psychological aspects.

I. Title. II. Series.

HG6041.S758 2007

332.6401'9—dc22

2006013294

For Margie, my partner in unchanging youth

To hold an unchanging youth is to reach at the end, the vision with which one started.

—Ayn Rand

Introduction

The greater the difficulty the more glory in surmounting it. Skillful pilots gain their reputation from storms and tempests.

—Epictetus

This is a book forged from storms and tempests. Roughly one year after the publication of *The Psychology of Trading*, I left the protected world of academic medicine to tackle the rough-and-tumble world of proprietary trading in Chicago. Gone were orderly therapy sessions in my Syracuse office. Now my day started at 4:05 A.M. and proceeded into evenings: a steady blur of tracking overseas markets, updating research, commuting into the city, moving from office to office to help traders as they traded, and then returning home to prepare for the next trading session. If *The Psychology of Trading* was my view from the ivory tower—my integration of academic psychology and practical trading—*Enhancing Trader Performance* is my perspective from the trenches. And quite a view it has been . . .

THE WINDING PATH FROM TRADING PSYCHOLOGY TO TRADER PERFORMANCE

So much has happened since late 2002, when I sat in the food court of Wegman's grocery finishing my book, plunking away at my laptop, sipping my coffee. My e-mail inbox is fuller than it was back then—it stands at 432 as I write—and I've encountered traders from just about every conceivable setting and market. My personal web site and research blog

register thousands of hits weekly, including a surprising number from Europe, Asia, and the Pacific Rim. Each day, I hear of the hopes, dreams, frustrations, and hurdles of traders around the world. Such is the privilege—and the challenge—of work in the trenches.

Nothing, however, could have fully prepared me for the frontline exposure I faced at Kingstree Trading, LLC, in Chicago. No longer was I merely talking with traders about trading. Now I was *in* the trading, live, real-time. It is one thing to talk about what to do when a trader is caught in adverse market movement with a thousand-lot on. It is quite another to work with someone while that thousand-lot is veering into the red at \$12,500 a tick. Day after day on those front lines, you learn a lot about trading and traders. You also learn quite a bit about yourself.

This book reflects that learning.

Every worthy book is like a symphony: It is held together by a theme that it explores and develops. One of my great joys as a writer is that *The Psychology of Trading* continues to sell as well today as it did when it first hit the bookshelves. I believe this is because its central theme—that the emotional problems faced by traders are extensions of the same problems we all face in dealing with life's risks and uncertainties—was both unique and empowering, transcending the simplistic advice too often associated with trading psychology.

I did not want to write another book until I had one that embodied an equally promising theme. For those of us devoted to writing, a book is something precious. It is an opportunity to communicate with the many people—present and future—that we will never be able to meet. There is very little of permanence that we leave behind when we depart this earth. Books, even more than wealth or kin, have the potential to outlive us, to make their mark on

those yet unborn. When you're an author, you don't want to squander that opportunity: You want to do it right.

And yet, writing a book is like living a life. You start with a set of plans neatly outlined in your head, only to look back later and wonder how you could have possibly gotten to this point. Edges of leaves, contours of clouds, hills, and plains—there are very few straight lines in nature. Nature is jagged and rough, bent and twisted. She may not be neat, but she's real. Real like a life lived. Real like words flowing from an author's hand. The best we can hope for, in books as in life, is that we've been faithful to our themes, that we've followed their twists and turns with integrity.

There have, indeed, been many twists and turns on the path to this book, but the theme has remained constant: *Trading is a performance discipline and trading performance can be cultivated through the same kinds of training activities that generate expertise in such diverse domains as athletics, chess, and the performing arts.* That theme has led me to scour research on performance; scrutinize the training programs of athletes, elite military troops, and medical professionals; and, especially, study the traders I've worked with—all in a quest to identify the ingredients of sustained trading success.

If I try to summarize the fruits of this quest in a single sentence, my conclusion would be: *Trading performance is less a function of what traders learn than of how they learn it.* Expertise is the outcome of a process. This process has clearly identifiable features and important applications to the development of traders. We see this process at work among Olympic athletes, and we witness it in world-class manufacturing plants and educational programs. The “what” of learning is always changing: Physicians must keep up with the latest research; traders face different market conditions every few years. The “how” of expertise development, however, is a constant. The same processes

that generated exemplary performance in ancient Greece are present today in every field in which outcomes matter.

Winding my way through performance research and the daily work with traders, perhaps my greatest shock has been the recognition that *a significant proportion of emotional problems affecting traders result from departures from the principles of sound training*. When traders do not find the markets and trading styles that match their talents and personalities, when they do not employ systematic training to translate talents into skills, and when they violate prudent risk management in eager hopes of rapid profits, they create needless frustrations and even traumas.

Having never experienced a structured training process and built the competence and confidence conferred by such learning, these traders are ill equipped to adapt to changing market conditions. This, no doubt, has been my most eye-opening experience in trading's rough-and-tumble world: *that trading success in the present so rarely ensures future success*. Market conditions—and the edges that we find in markets—change so radically that ongoing success is guaranteed to no one. The winners in this trading world are not only those who train, but those who *sustain* enhanced learning processes. That is why this book is not only for those traders looking to make themselves successful, but also for those seeking to remake themselves.

I hope that these pages, drawing upon the insights of researchers and practitioners far more steeped in the cultivation of expertise than I, will help traders think—and rethink—what it takes to achieve elite performance in this most rewarding and challenging of arenas. There is much in the trading world that promises you success as a function of *what* you learn: chart patterns, indicator readings, software displays, and self-help skills. There are few guideposts to the *how* of expertise. My deepest wish is that *Enhancing Trader Performance* becomes such a guidepost for you—not only in

trading, but in every area of your life in which performance counts.

A LOOK TO THE FUTURE

The future for traders is rapidly changing. The booms in automated trading, arbitrage, and globalization are creating new areas of opportunity even as they wring others dry. It is no longer enough to know when and how to trade: *What* to trade—where to find one's greatest opportunity—is equally important. After all, even the best fishermen will come home empty-handed if they dip their lines into unstocked ponds.

As I write this, many traders are coming home empty-handed. The old ways of trading—sticking with the well-populated stock indexes and trading patterns of momentum and trend—are no longer working. I recently wrote an article for the Trading Markets web site in which I tracked the proportion of two-day trending periods in the S&P 500 Index over the past 40 years. The resulting graph sloped steadily downward. Many individual stocks, however—particularly those not typically included in the baskets of stocks employed in program trading and arbitrage—showed an upward slope, as did selected alternative trading vehicles. Future performance is likely to require increasing degrees of creativity in matching trading styles and markets. My personal research and trading have shifted in that direction, and I invite you to join me in the quest for alpha by staying in touch through the web sites.

I hope that this book will not only assist individual traders, but also help to speed developments within the trading industry. Until now, much of trading education has consisted of the provision of content: seminars, articles, and information. Increasingly, I believe we'll see a shift toward ongoing training and the professionalization of trading as a discipline. We are already seeing the start of such a

development in the software field. Just a few years ago, we had separate applications for market analytics, charting, screening, and order execution. Now we are seeing vendors roll all of these features into single, integrated applications that streamline the process from trade idea development through trade management. I recently sipped coffee at a Chicago Starbucks with Joe Kohnen of CQG, Inc., and reviewed the path his company had taken: depth of market, charting, analytics, and order execution now exist on a single page, with order entry as simple as releasing the mouse on the bar of a chart. Rapidly, these performance efficiencies are becoming the norm for all electronic traders.

The greatest of these developments, I believe, will be the integration of education and training through realistic simulation, detailed performance metrics to track performance, and archives of past market data to replay—and retrade—markets for concentrated practice. We will see education and training integrated into order execution platforms on a real-time basis, so that every credible platform is also a sophisticated tool of trader development.

The history of the trading industry is one of democratization. What was once available to institutions eventually reaches the trading public. This includes access to information and research, the leveled playing field and reduced trading expenses afforded by the electronic medium, and the ability to monitor multiple market events in real time and execute complex trading strategies. I have no doubt that this trend will continue. At present, only a few professional firms have the resources to hire in-house trading psychologists and mentors. Before long, however, those all-in-one trading platforms will feature real-time education and mentorship via videoconference, bringing elite training to the trading public. If this book is but a small catalyst toward such a future, I will be gratified and honored indeed.

Most important, however, is to look to *your* future. If it is your ambition to develop trading expertise, do you have a process in place to guide your development? Do you know what you will need to build the skills required for sustained success? You are like an Olympic hopeful; what stands between you and an opportunity for the gold is training: transforming talents into skills and skills into performance. If you read between the lines, you'll see that this is a book about the development of traders, but also about the development of performance itself—in any field. You may or may not choose the path of the trader, but I do hope that you find *your* path: the field of endeavor that best develops you as a performer. In mastering performance, we master ourselves and, in so doing, become more than who we are. What greater calling can there be?

Brett N. Steenbarger, Ph.D.

Naperville, Illinois

March 2006

Acknowledgments

One element has remained unchanged since the writing of *The Psychology of Trading*: the depth of my gratitude to the many people who have provided me with inspiration, insight, and support through all the storms and tempests. First among these are my parents, Jack and Connie Steenbarger, who instilled and modeled the values of entrepreneurship and caring from an early age. Words cannot express my debt to them or my admiration for their many strengths.

I owe much to my own family—Margie, Devon, and Macrae—who encouraged me through the long hours of the working and writing, as well as to our big kids—Debra, Peter, Steve, Lea, Laura, and Ed—who have been constant supports. My appreciation also embraces the larger family: Marc, Lisa, Arnold, Rose, Bert, Ralph, Adrienne, and their supportive families as well.

I have learned much about trading—and even more about working with traders—from Chuck McElveen, who opened the door and brought me to Kingstree. He has been a role model from the start in his caring for traders and commitment to them. This book would never have been possible had it not been for Chuck's vision in creating Kingstree, which was designed from the start as an incubator of the success that results when talent meets opportunity. Marc Greenspoon deserves special mention, not only because he was the initial impetus for my coming to Kingstree, but also for all he has taught me about successful trading and its relationship to continual self-improvement. Readers will also recognize the size of my debt to Scott Pulcini, whose competitive spirit and sheer skill at reading markets have been the source of so much inspiration.

Throughout my tenure at Kingstree, Pablo Melgarejo has been a model of market insight and trading perspective. Readers will find his hard-earned wisdom invaluable. In all, I cannot thank the staff and traders and Kingstree enough for their friendship and collegiality.

A very special treat since relocating to Chicagoland has been my continued connection to Upstate Medical University in Syracuse and its Department of Psychiatry and Behavioral Sciences. For that I am grateful to Department Chair Mantosh Dewan, M.D., and Psychology Division Head Roger Greenberg, Ph.D. They are dearly valued friends and colleagues.

Some of my greatest professional debts are to the many fine traders who have provided me with mentorship and guidance, as well as friendship. Victor Niederhoffer has been both teacher and role model, the embodiment of the scientific ideal in trading. I thank him and Laurel Kenner for their continued nurturance of the Spec List, an intellectual haven for inquiring traders. I've learned much from Jon Markman; Jim Dalton; Linda Raschke; Trevor Harnett at Market Delta; David Norman from TraderDNA; Larry Connors, Eddie Kwong, and Ashton Dorkins of Trading Markets; Todd Harrison and Matt Ford of Minyanville; Yale and Jeff Hirsch; John Forman; Terry Liberman of WINdoTRADER; Henry Carstens; David Aferiat of Trade Ideas; Charles Kirk of The Kirk Report; Gail Osten; Breon Klopp of PIT Instruction and Training; and Gene O'Sullivan and Joseph Koehnen at CQG. Curt Zuckert, DeBorah Lenchard, Robin Gemeinhardt, Tony Zaccaria, Linda Goldsmith, and the staff of the Education Department at the Chicago Mercantile Exchange have been industry leaders in the field of training traders, and I have been their eager student.

But if we save dessert for last, a special note of appreciation goes out to my friend and editor, Pamela Van Giessen, whose work at Wiley has exemplified astuteness,

integrity, and a love of authors and writing. She has been the midwife to many fine trading works. Thanks, too, to Jennifer MacDonald and the staff at Wiley for their capable help in bringing this book project to fruition.

Finally, I want to express heartfelt appreciation to the many traders I have worked with personally and who have stayed in touch over the years through the book, articles, and web sites. I have learned more from you than I can ever possibly convey in words.

Author's Note

As with my previous book, *The Psychology of Trading*, I present a number of case examples throughout this book. Most of these are composites of actual traders and trading situations I've worked with, but I have altered and blended identifying details to ensure confidentiality. These composite cases are identified by a fictional first name only. At other points in the book, I discuss actual expert traders I have worked with and identify them—with their permission, of course—by first and last name. To ensure accuracy, all of the traders named in the book reviewed what I wrote about them, made their desired changes, and approved the final text. To their credit, none of the traders sought to embellish their depiction in the text. What you see is what they've got.

Finally, a disclaimer: I mention commercial products and services that I have found to be useful as performance aids and include a list of those resources in the appendix. None of these mentions were solicited by the firms or individuals listed, nor do I hold any commercial interest in or receive any compensation from those mentioned.

B.N.S.

CHAPTER 1

Where Expertise Begins

The Performance Niche

I'm a big believer in starting with high standards and raising them. We make progress only when we push ourselves to the highest level.

—Dan Gable

He was cut from his team in his sophomore year of high school. Any hopes of obtaining a college scholarship were quickly receding. Most aspiring athletes would take their lumps, join a local league or intramural squad, and move on with their lives. Michael Jordan, however, was not like most young athletes. He responded to the cut by practicing day after day. When he felt too tired to continue, he forced himself to recall his cut from the team and drove himself harder. Two years later, he was a McDonald's All-American and the MVP of the McDonald's game. The year after that, he hit the game-winning shot for the University of North Carolina in the NCAA finals. By the time his NBA career ended, Jordan had made an astonishing 25 game-winning shots, perhaps none as memorable as the jumper he nailed against Utah on June 14, 1998. With 5.2 seconds left and no one in the house doubting who would take the last shot, he sealed his sixth championship for the Chicago Bulls.

Michael Jordan was an elite performer, one of many we will encounter in this book. Yet Michael Jordan was not always Michael Jordan. His rise from high school reject to college star was dramatic, but not stellar. He never averaged more

than 20 points per game during his college career and was selected third in 1984's NBA draft. All signs pointed to stardom, but not superstardom. Nonetheless, Michael Jordan—along with a small handful of other athletes—stands today as a towering symbol of expert performance.

What makes expert performers tick? How are they different from average performers? Is expertise the result of natural, inborn talent, or can it be cultivated? And, most important of all, what can we learn about trading expertise by studying expert performance in other fields? In this book, we will find common factors that contribute to the success of chess experts, Olympic athletes, world-class performing artists, and successful traders. One of those factors is finding a performance niche: a specific activity that is most likely to capitalize on your talents and interests. Michael Jordan had a niche in basketball; he did not find one in baseball. Dan Gable started his athletic career as an undistinguished swimmer, later to discover his own world-class talent as a wrestler—and then as a wrestling coach. Discovering your trading niche may well make the difference between a hall-of-fame trading career and a disappointing one that never quite makes prime time. Sadly, most traders stumble into their markets and trading styles, never to discover where their opportunities might truly lie.

A TALE OF TWO TRADERS

Al and Mick were two short-term traders at a professional trading firm. Both traded the electronic Standard & Poor's (S&P) 500 (ES) E-mini futures contract, and both gave me carte blanche to stand by their screens during market hours so that I could help them with their trading.

I began the day watching Al. The market was trading in a narrow range early in the morning after an attempted rally fizzled. The average price from the day before was about

three points below the market's current level, and I had a strong sense (based on my historical studies) that we would take out that average price. Al, Mick, and a handful of other traders had met with me before the trade, and we discussed using the likelihood of the market hitting that level as a potential trade idea. Nevertheless, Al was leaning to the long side. I was skeptical, but decided not to press the point.

As the market ground lower and Al's position went into the red, he shook his head in recognition of his error. Very soon afterward, however, he stopped himself out of the position and flipped to the short side. He was able to pick up a few ticks before the market reversed on him once again. The choppy action continued through the morning, with a mild downward drift. Al was patient, but not making much money for the day. He took a break at lunchtime and expressed to me his hope that the afternoon trade would pick up. Throughout the morning he maintained his composure and held his own in a difficult trade. He expressed optimism that taking a lunch break and clearing his head would help him focus through the afternoon and take advantage of opportunity. Never once did he lose his composure or his positive attitude.

When I moved over to Mick, however, it was a very different story. Mick also tried to play the market's upside and found his position underwater. Enraged, he held onto the position past his stop point, only to see his losses expand. My cautionary comment to Mick was "If your morning losses are small enough, you'll have a fighting shot to make them up in the afternoon." He eventually did exit the position, but refused to take a break at midday. He reviewed every piece of market data from the morning, replaying his bad decisions. All the while he shifted in his chair, pounded the table, raised his voice, and otherwise expressed his frustration. He became particularly agitated when he reviewed the morning trade on his videorecorder. "I

can't believe I was so stupid," he fumed. He then proceeded to tell me five things he should have seen in the market to tell him we were going lower. Come hell or high water, he practically shouted, he was going to focus on those five things in the afternoon.

Al and Mick: two very different traders. One of them made a high five-figure sum during the afternoon; the other one struggled to break even all day.

One was an expert trader, the other was struggling.

Al kept himself emotionally balanced, taking liberal time away from the screen after setbacks. He honored his stops religiously and didn't become irate at losses. He consistently expressed optimism over his development and a love of trading.

Mick was anything but balanced, taking losses almost as personal affronts. He periodically violated his risk management guidelines and could not break from the markets until he had rehashed all his mistakes and fumed over each. At such times, he spoke of the market and himself with equal derision.

Most of the trading psychology books you'd read would give the trading edge to Al, the more disciplined, less emotional performer. But Al, the novice, never did succeed at trading. Mick was—and remains—a multi-million-dollar performer. The experience of working with many Micks and Als—and seeing common wisdom about trading success shot down time and again—convinced me to write this book.

THE CORNERSTONE OF EXPERTISE

No doubt, there's a bit of the young Michael Jordan in Mick. He doesn't accept defeat lightly, and he uses losses to drive

himself forward. That is characteristic of elite performers, we shall learn, but there's something even more basic that distinguished Mick from Al. In fact, it's so basic that K. Anders Ericsson, perhaps the most prolific researcher in the field of performance, considers it the cornerstone of expertise.

Think of the difference between Al and Mick as something that occurs every day, for approximately 250 trading days a year. Both Al and Mick trade frequently enough that they have winning and losing trades each day. Al puts his losses behind him and clears his head, to focus on the upcoming trade. Mick fusses and fumes, but uses the losses to review his trading, figure out the market (and his mistakes), and get his money back.

Over the course of a year, Mick's reviews ensure that he has easily experienced twice as much market action as Al. Moreover, Mick has systematically reviewed his performance and made constant adjustments. Al, though more relaxed, has little basis for detecting and correcting his errors. Mick, for all his emotionality, has become a learning machine, using losses to improve his trading. Ericsson refers to this as *deliberative practice*, and it is a hallmark of expert performers. Through guided practice, experts open themselves to feedback and, as a result, become better decision makers.

We often hear the phrase "practice makes perfect," but performance experts in sports emphasize that it is *perfect practice that makes perfect*. How practice time is structured makes the difference between a performer with 10 years of experience and one who has a single year of experience repeated 10 times over.

All performers face a chicken-and-egg dilemma: They need confidence and motivation to win, but they need to win to develop such a winning mind-set. *This is why rehearsals are so important: They permit repeated experiences of mastery*