Beware the inexperienced financial advisor with a high trait emotional intelligence: psychological determinants of the misperception of the risk-return relationship.

Abstract

Taking risk in the financial market should reward investors with higher returns. However, most investors perceive this relationship as negative. In this study, we showed for the first time that even professional financial advisors misperceived the risk-return relationship, and we investigated the psychological determinants of this misperception in professionals. Specifically, we assessed the role of feelings towards the financial market, trait emotional intelligence (EI), and trading experience. Our results showed that financial advisors with high (vs. low) trait EI were more impacted by their feelings when estimating expected returns. Specifically, inexperienced advisors with high (vs. low) trait EI are more likely to expect a negative relationship between risks and returns. Our findings shed light on the need to educate professionals on their reliance on emotions in financial judgments.

Keywords: risk, expected return, trait emotional intelligence, experience, affect heuristic, financial advisor

1. Introduction

In the financial markets, over long time horizons and through efficient diversification, risk and returns are usually positively correlated, thus implying that investors should be willing to accept higher risks to achieve higher returns (Shefrin, 2001). However, research shows that lay people (MacGregor et al., 2000; Rubaltelli et al., 2010) as well as high-net worth investors (Statman et al., 2008) perceive this relationship to be negative (Alhakami & Slovic, 1994; Statman et al., 2008). For instance, imagine Mr Gray, who is looking to invest in a stock fund and is conflicted on what to do. He has a feeling that stocks are quite risky, and he does not expect them to have particularly good performance, although he seems to remember that financial theories state that risk and return are positively correlated. He is therefore reluctant to invest in high risk assets, thus potentially missing on a good investment opportunity.

An explanation for this misperception is based on the affect heuristic. The affect heuristic (Slovic et al., 2004) states that people tend to base their judgments about risk and returns on affective cues. People tend to associate highly risky events or behaviors (e.g., an investment in stocks) with negative feelings and use these affective reactions to judge their returns which, as a consequence, are perceived as low. In finance, this misperception leads many investors to biased judgements and potentially unfavorable or too conservative investments behaviors, such as buying when the market is high and selling when it is low (thus, failing to take advantage of a contrarian investment strategy; Friesen & Sapp, 2007) or underinvest in stocks (Siegel & Thaler, 1997). However, individual investors such as Mr. Gray can rely on professional financial advisors whose job is to manage their clients' money and should therefore be more expert about investments and the financial market's dynamics.

Nevertheless, to the best of our knowledge, no previous studies investigated whether professional financial advisors are actually less susceptible to these affective biases. Previous research on the misperception of the risk and return correlation indeed focused on students and high

net-worth investors who are likely to invest more than average people because of their wealth. Thus, the aim of this study is to investigate for the first time if professional financial advisors misperceive the risk-return relationship too and investigate the psychological determinants of this misperception in professionals. Specifically, we will assess the role played by a series of variables that pertain to how professionals perceive and manage their emotions, their experience, and contextual factors (i.e., their confidence in the future performance of the national economy).

Since the misperception of the risk-return relationship in financial investments is an affect driven bias, we can expect that people's management and regulation of their emotions play a relevant role in their judgments. A growing body of work has linked people's trait emotional intelligence (EI) to investment decision-making. Trait EI is defined as a set of emotion-related self-perceptions and dispositions located at the lowest level of personality hierarchies (Petrides et al., 2007). Higher trait EI has been linked to higher sensitivity to environmental emotional cues (Petrides & Furnham, 2003) better stress management (Petrides et al., 2006) and more accurate anticipation of emotions elicited by decisions' outcomes (Sevdalis et al., 2007). However, since it is a personality dimension, higher levels of trait EI correspond to a specific behavioral tendency that depending on the context can be either adaptive or maladaptive (Peña-Sarrionandia et al., 2015). Better regulation of emotional reactions can indeed protect people from impulsive behaviors. However, when decisions are made under uncertainty and the reliability of other information is difficult to assess, emotions might be the only useful cue to make a forecast about future events (Rubaltelli et al., 2010). As a result, people with high trait EI might be willing to let their emotions emerge and to rely on them especially when they are unable to base their judgments on other, more diagnostic information (Peña-Sarrionandia et al., 2015). However, in an uncertain environment like financial markets, relying too much on one's emotions can conflict with the tenets of financial theories and effective investment strategy. For instance, a study from Rubaltelli and colleagues (2016) showed how people with high (vs. low) trait EI were more willing to invest regardless of the expected value. As

a result, when the expected value was positive they gained money whereas when the expected value was negative they lost money.

This potential negative effect of trait EI might also be enhanced in conditions when individuals are unable to rely on other types of information, such as when experience is low. Indeed, experience is an important factor in investors' behavior. According to previous literature, more (vs. less) experienced investors should be better able to understand the market and to judge the future returns independently from their feelings of the moment (Dvorak & Hanley, 2010; Frijns et al., 2014). Experienced investors have likely gone through different economic cycles and they should have learned not to trust their gut feelings too much. Consistent, Barber and Odean (2000) showed that among financial professionals, experience leads to an increased proficiency to assess their trading ability.

Summarizing the literature reviewed so far, we know that based on the affect heuristic, investors are likely to perceive a negative correlation between risk and return. In addition, when they have high (vs low) trait EI they should be more likely to attend to emotional cues to predict the future performance of the market. However, experience should reduce this tendency by making investors more aware of their past reliance on non-diagnostic information. Therefore, we make the following hypotheses:

Hypothesis 1: Increasing perception of risk associated with investing in a series of companies should lead to decreasing expected returns in professional financial advisors.

Hypothesis 2: Trait EI should moderate the effect of feelings on the perception of risk and expected return. Specifically, the effect of the feelings toward the market should be stronger for professional financial advisors with high (vs. low) trait EI.

Hypothesis 3: The interaction between risk perception and trait EI should be moderated by professional trading experience. Specifically, the moderating effect of trait EI on the relationship between risk perception and expected return should decrease as experience increases.

2. Method

2.1 Participants

A total of 273 Italian participants (27% female, mean age=49.72 yrs., *SD*=9.43) took part in the study. Participants were recruited through TESEO Srl, an Italian consulting firm, and were primarily financial advisors. They received the link from TESEO Srl and answered the questionnaire online. Participants who did not fully complete the survey were excluded from the sample. Thus, the final sample included 191 participants.

2.2 Materials and Procedure

Data collection took place online between April 2 and May 23, 2019. After giving their informed consent participants completed a mental imagery task (Gavaruzzi et al., 2021; Rubaltelli et al., 2010) to measure their feelings toward the financial markets. They were presented with three words: *stocks*, *bonds*, and *financial market*. For each word, they were asked to rate the feelings these words evoked on a 9-point scale ranging from - 4 (extremely negative) to + 4 (extremely positive). Then, participants were asked to rate their expectations about the future of the Italian economy three years from the day they completed the survey, on a 7-point scale ranging from 1 (absolutely gloomy) to 7 (absolutely optimistic). This measure was added to determine whether the participants' expectations about the future of their country's economy could influence the perception of risk and expected return of an investment. Results can be found in the Supplementary Materials (Table S.M.1). Afterwards, participants were also asked to evaluate, for the current year, the potential risk and expected return (i.e., subjective estimate of an investment's return) of investing in five large Italian companies listed in the Milan Stock Exchange and familiar to the

participants (Assicurazioni Generali, GEOX, Piaggio, Poste Italiane, Enel). Participants provided their ratings on a 10-point scale ranging from 1 (no risk/no return) to 10 (extreme risk/very high return). In the following section of the questionnaire, participants were presented with the short form of the Trait Emotional Intelligence questionnaire (TEIQue-SF, Petrides, 2009). This is a 30-item questionnaire using a 7-point response scale ranging from 1 (completely disagree) to 7 (completely agree). The items ask participants to self-report their ability in regulating, expressing, and perceiving emotions (α= .89). The survey ended with the assessment of experience in active trading (number of years) and demographic questions (e.g., political orientation). Completion of the questionnaire took about 10 minutes.

3. Results

3.1 Preliminary analyses

Since the feelings evoked by the three items from the mental imagery task were correlated to each other, we averaged the answers to create a single score of feelings (α = .71). Similarly, we computed a single score of expected return by averaging participants' estimates for the five companies they were asked to evaluate (α = .73) and a score of risk of investing in each of the companies (α = .85).

Consistent with Hypothesis 1, correlation showed that expected return and risk were significantly and negatively correlated. Trait EI was significantly and positively related to both feelings towards the financial markets and expectations about the Italian economy. However, it was not correlated with either estimates of risk or expected return. The years of experience did not correlate significantly with any of the variables in the matrix (Table 1).

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Table 1. *Correlations and descriptive statistics for the main variables.*

	1.	2.	3.	4.	5.	Mean	SD
1. Trait EI	---					5.14	.74
2. Feelings	.18*	---				1.58	1.41
3. Economy	.20**	.29***	---			3.22	1.37
4.Expected return	-.14	.12	.20**	---		4.73	1.05
5. Risk	.05	.04	-.03	-.23**	---	5.64	1.57
6. Experience	.04	-.05	.00	-.02	.01	23.18	10.09

3.2 Expected return and risk estimates

We first investigated whether the interaction between trait EI and feelings predicted expected return estimates for the aggregated index of the five companies listed in the Italian stock market. The model also included expectations about the future outlook of the Italian economy, political orientation, gender, age, and experience as covariates. Consistent with Hypothesis 2, results showed a significant effect of trait EI, as well as a significant effect of feelings. There was also a significant effect of people's expectations about the future outlook of the Italian economy. In addition, the interaction between trait EI and feelings was significant (Table 2).

Table 2. *Predictors of expected returns estimates.*

	B	SE	t	p	β	95%CI	
						LL	*UL*
Intercept	6.82	0.84	8.12	.000		5.16	8.47
Trait EI	-0.46	0.13	-3.45	.001	-.32	-.72	-.20
Feelings	-0.62	0.31	-1.99	.048	-.84	-1.24	-.00
Italian economy	0.17	0.06	3.00	.003	.22	.06	.28
Political orientation	-0.16	0.09	-1.68	.095	-.12	-.34	.03
Age	-0.00	0.01	-0.06	.952	-.00	-.02	.01
Gender	0.08	0.17	0.47	.641	.03	-.25	.26
Trait EI x Feelings	0.14	0.06	2.2	.029	.09	.01	.26
Adj. R^2	0.08						

A slope analysis showed that the effect of feelings on expected returns was significant for participants with high trait EI ($B = .18$, $SE = .06$, $t = 1.34$, $p = .03$) but not for those with low trait EI ($B = -.03$, $SE = .07$, $t = -.38$, $p = .70$). Increasingly negative feelings led people with high (vs. low) trait EI to estimate lower expected returns (Figure 1). Furthermore, a Johnson-Neyman test showed that when the score of trait EI was above the value of 5.09 the effect of feelings became significant.
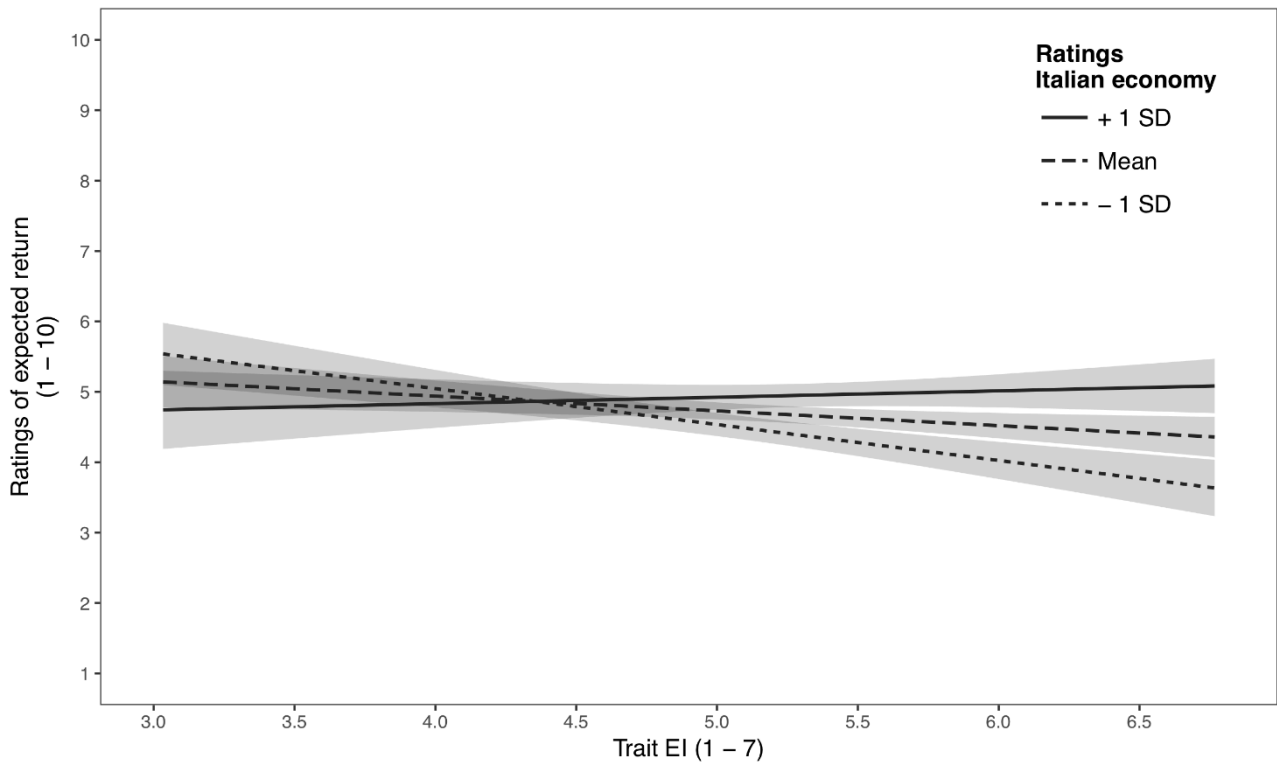
Figure 1. Interaction between trait EI and feelings towards the stock market predicting participants' estimates of the average expected return of five companies listed in the Italian stock market.

We repeated the same analyses as above to assess whether the interaction between trait EI and feelings predicted participants' risk estimates for the aggregate index of the five companies listed in the Italian stock market. Results showed that none of the effects were significant in contrast with Hypothesis 2 (Results can be found in the Supplementary Materials, Table S.M.2).

3.3 Risk-return correlation

Finally, we run a linear regression with trait EI, risk estimates aggregated for the five companies, experience, all two-way interactions, and the three-way interaction between trait EI, risk, and experience with expected return estimates as the dependent variable (Table 3; results for the five companies separately can be found in the Supplementary Materials Table S.M.3). Results

showed main effects of trait EI, risk estimates, and experience. Significant effects emerged also for the interactions between trait EI and risk, trait EI and experience, and risk and experience. Finally, the three-way interaction was also significant.

Table 3. Predictors of expected returns.

	B	SE	t	p	β	95%CI	
						LL	UL
Intercept	-8.25	5.52	-1.49	.137		-19.15	2.65
Trait EI	2.74	1.04	2.63	.009	1.89	.68	4.80
Risk	2.79	0.91	3.08	.002	4.11	1.00	4.58
Experience	0.55	0.25	2.21	.029	5.20	.06	1.05
Political orientation	-0.19	0.10	-2.00	.047	-.15	-.39	-.00
Age	-0.01	0.01	-1.08	.283	-.11	-.04	.01
Gender	-0.04	0.18	-0.22	.826	-.02	-.40	.32
Italian economy	0.19	0.06	3.45	.001	.25	.08	.31
Trait EI x Risk	-0.56	0.17	-3.26	.001	-.38	-.90	-.22
Trait EI x Experience	-0.10	0.05	-2.19	.030	-.15	-.19	-.01
Risk x Experience	-0.11	0.04	-2.60	.010	-.9995	-.19	-.02
Trait EI x Risk x Experience	0.02	0.01	2.57	.011	.01	.00	.03
Adj. R^2	0.20						

We then run a slope analysis to probe the three-way interaction between trait EI, risk estimates, and experience. Consistent with Hypothesis 3, results revealed that as experience increased the effect of the interaction between trait EI and risk on expected return estimates decreased. For advisors who have low experience and judged the risk as high, we found a significant slope indicating that, those who have high (vs. low) trait EI are more likely to expect a negative correlation between risk and expected return (B = -.82, SE = .19, t = -4.24, p < .001; Figure 2). Among low experience advisors, the effect of trait EI on expected return estimates was not significant when participants judged risk to be average (p = .08) or low (p = .18). For participants with high experience, instead, the effect of trait EI on expected return estimates was never significant regardless of the estimates of risk of the investment (ps = .40 or higher). In all these cases, an estimate of high risk led to the expectation of lower returns compared to when risk was estimated to be low. The same analysis has been conducted with risk as depended variable and can be found in the Supplementary Materials Table S.M.4.
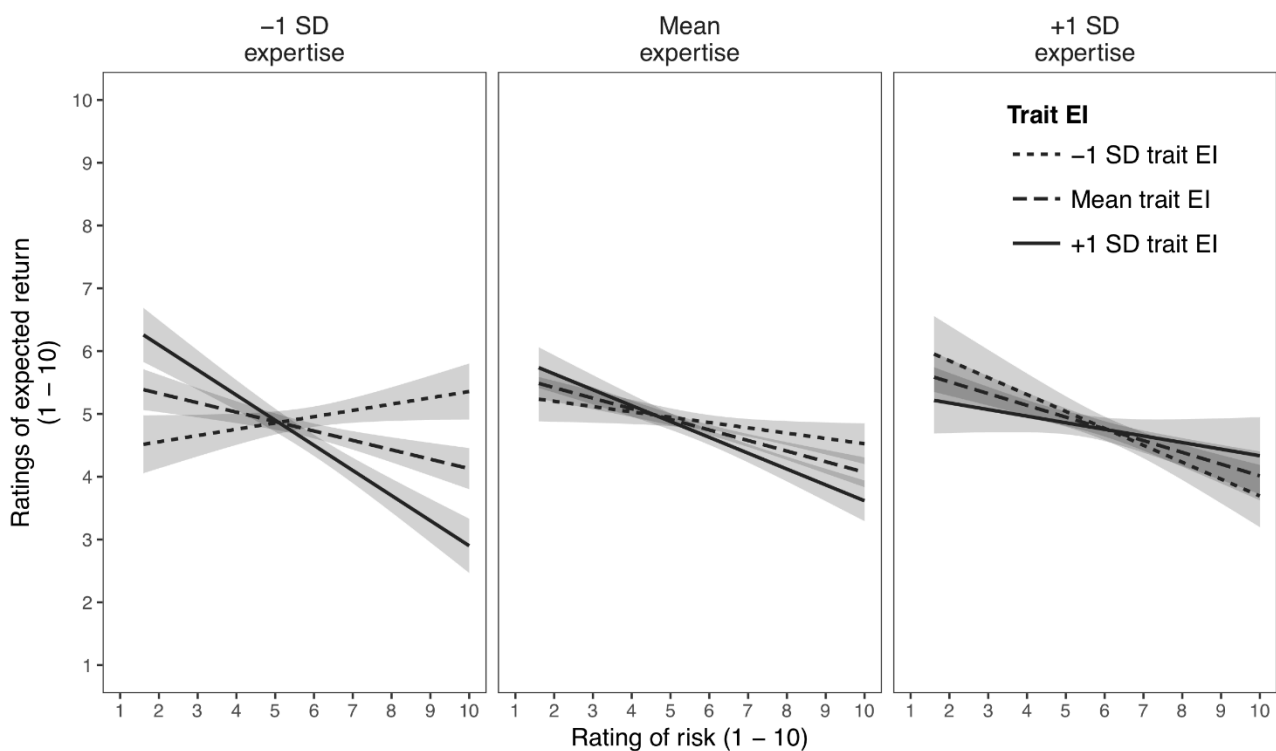
Figure 2. *Three-way interaction between trait EI, risk estimates, and experience predicting expected return estimates.*

4. Discussion

The aim of our study was to investigate the misperception of the relationship between risk and returns in professional financial advisors. Our results showed that they perceive a negative correlation much like individual investors. Moreover, we found that this misperception is moderated by trait EI and years of experience. As experience increases, the impact of trait EI decreases. This is a novel set of results which contributes to the literature on investment behavior and the role of individual differences in multiple ways.

First, we reported for the first time that professional financial advisors also show a biased perception of the risk-return relationship. This misperception is in line with the affect heuristic that shows how people often rely on their feelings to judge risk and benefits, which are often perceived as negatively correlated (Slovic et al., 2004). Consistently, the same has been found in the financial markets, where investors perceive a negative relationship between risk and expected return, despite the fact that historical data show a positive correlation between these two dimensions (Statman et al., 2008). Nevertheless, previous studies have been conducted with students or high-net worth investors. On the contrary, we used a sample of professional financial advisors who should be experts of the actual dynamics of the financial market and are expected to base their judgments mostly on their economic knowledge.

Second, we showed that trait EI and feelings towards the financial market moderate the misperception for the risk-return relationship. When making a decision on how to invest their clients' money, financial advisors are required to make predictions about the future outcomes of the assets. In a highly uncertain and complex environment such as the financial market, they are likely to experience a large set of emotional reactions. Research shows that, in the financial market, reliance on feelings can have a significant impact on financial decision making and potentially lead

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to mistakes (MacGregor et al., 2000; Rubaltelli et al., 2010). Consistently we showed how financial advisors with high (vs low) trait EI were more prone to use their feelings to estimate expected returns.

Third, we showed how the level of experience in trading plays an important role in the risk-return misperception, too. Specifically, our results showed a difference between advisors with high and low experience that, in turn, was moderated by their trait EI. Among all financial advisors, those with lower experience and high trait EI reported a more negative correlation between risk and expected return. A possible interpretation of this finding is that, in a context characterized by high uncertainty, highly emotional intelligent but inexperienced advisors let their feelings emerge and guide their assessment of the market because they are not yet able to use other, more diagnostic cues. As a result, and consistent with the explanation based on the affect heuristic (Statman et al., 2008), this leads to an exacerbation of their perception of the negative correlation between risk and expected returns. This interpretation is consistent with the fact that the effect of trait EI did not emerge for the more experienced financial advisors, likely because they have learned not to trust their emotional reaction but to rely more on other types of information. This result adds up to a line of research that highlights the potential maladaptive side of trait emotional intelligence, since higher sensitivity to one's own emotions leads less experienced investors to rely more on affect, thus enhancing their misperception (Petrides, 2011).

Despite the contributions we made, this paper is not without limitations. For instance, we measured experience in terms of years of activity in the financial market. However, we did not control for participants financial literacy. Future studies should measure this dimension since it has been shown to predict financial decision making (Lusardi & Mitchell, 2014). Nevertheless, previous studies showed a correlation between years of experience and financial literacy (Dvorak & Hanley, 2010; Frijns et al., 2014) thus our conclusion regarding the role of job experience seems to be backed by the literature.

Moreover, we did not ask about the type of clients our participants work with. It is possible that private financial advisors (vs retail) might be more knowledgeable, manage larger portfolios, and use investment tools that require higher levels of risks. Thus, future studies should gather more information about the financial advisors, their clients, and the type of investment tools they work with.

In our study more experienced financial advisors showed to rely less on emotional cues. However, we can only speculate about what other kind of information they use to make their predictions. Future studies could manipulate the presentation of different types of cues (e.g., charts, news, company fundamentals) to better understand how they can influence this misperception.

Finally, other types of individual differences could play a role in shaping advisors judgments of risk and expected returns. For example, numeracy has been found to influence decision making in several domains (Peters et al., 2006) and it is likely to be related also with financial estimates especially when they are expressed in numerical formats (Almenberg & Widmark, 2011).

To sum up, Mr Gray should beware of talking to his financial advisor on matters related to the relationship between risk and return. In fact, he could receive very different answers depending on the level of experience and trait EI. Our study showed that these variables have a role in how financial advisors misperceive the correlation between risk and returns. This is an important finding that shed light on the need to educate professionals on their reliance on emotions in financial judgments.

Data availability statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

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