

Money Attitudes and Emotional Intelligence

ELISABETH ENGELBERG¹ AND LENNART SJÖBERG

*Center for Risk Research
Stockholm School of Economics*

As the notion of money tends to be imbued with salient emotions, it is plausible that emotional intelligence (EI) has a bearing on the efficacy to cope with emotion-eliciting issues involving money. The purpose of the present study was to investigate the extent to which money attitudes relate to EI. The study included a sample of 212 respondents who filled out a questionnaire with items of the Money Attitude Scale (MAS) developed by Yamauchi and Templer (1982). The questionnaire further contained a test of EI performance consisting of judging emotions in facial expressions, and of self-report measures considered to be subscales of EI. Results suggested that high levels of EI imply a less pronounced orientation toward money and a greater sense of economic self-efficacy. Furthermore, money orientation seemed to be linked to worse adjustment of work vs. family/leisure time.

Previous research has shown that people tend to perceive, value, and treat money differently (e.g., Furnham, 1996; Kirkcaldy & Furnham, 1993; Newcomb & Rabow, 1999). Money is, however, of little explicit concern in social psychology. The fourth, and latest, edition of *The Handbook of Social Psychology* (Gilbert, Fiske, & Lindzey, 1998) does not even list the word *money* in its index and has only one mention of economic concepts (“economic models of organization behavior,” in Volume 2). Yet, economic factors, including beliefs and attitudes, play a major role in life, and their interplay with more traditional psychological concepts should be of interest in psychology.

The relation between money attitudes and Emotional Intelligence (EI) is of special interest because research has shown that money tends to be imbued with salient emotions (e.g., Ennis, Hobfoll, & Schroeder, 2000; Furnham & Okamura, 1999; Mates & Allison, 1992; Prince, 1993; Rubinstein, 1980). Monetary issues also tend to have a profound impact on emotionally significant relationships (e.g., Burgogne, 1990; Conger et al., 1994; Deutsch, Roksa, &

¹Correspondence concerning this article should be addressed to Elisabeth Engelberg, Center for Risk Research, Stockholm School of Economics, Box 6501, S-113 83 Stockholm, Sweden. E-mail: Elisabeth.Engelberg@hhs.se

2027

Journal of Applied Social Psychology, 2006, **36**, 8, pp. 2027–2047.

© 2006 Copyright the Authors

Journal compilation © 2006 Blackwell Publishing, Inc.

Meeske, 2003; Harvey, Beckman, Browner, & Sherman, 2002; Walker & Garman, 1992). As EI is partly defined as the adaptive regulation of emotions in self and others (Salovey & Mayer, 1990), the concept may be of use in shedding some light on the ability to cope with money-related issues. The concept underlying EI is discussed below, following a review of previous research on money attitudes.

Money Attitudes

People's attitudes toward money seem to be acquired through education, professional experience, and monetary habits (see e.g., Furnham & Argyle, 1998). One of the early studies was conducted by Wernimont and Fitzpatrick (1972) who had a differential approach. They found that money had a good deal of symbolic value. For instance, money was taken to exemplify comfort and security, but also failure or insufficiency in some respects. In a recent study, it was similarly found that groups of unemployed persons, as well as college students, tend to feel a sense of inadequacy as it relates to money (Bailey & Lown, 1993).

More elaborate taxonomies of people's money attitudes have been suggested, and mostly reveal how the symbolic meaning of money may give rise to idiosyncratic kinds of behavior. Goldberg and Lewis (1978) identified what they termed *security collectors*, *autonomy worshippers*, and *power grabbers*. For people in any of these categories, money is sought for the security, freedom, or power that it may provide, although ultimately for the purpose of minimizing a sense of vulnerability. The compulsive saver is driven by a motive to reduce the anxiety associated with distrust felt towards others. Therefore, security collectors, in similarity to worshippers of autonomy, hoard money in order to become less dependent upon and confined to the immediate environment. Power grabbers, in contrast, are likened to people who strive to amass a fortune in order to acquire control of people around them and thus avoid experiencing helplessness and humiliation.

Forman (1987) similarly found that money behavior is hardly rational, but rather governed by powerful and often unrecognized emotional forces. The taxonomy suggested by Forman includes comparable categories to that of Goldberg and Lewis, such as the penny-pinching *miser* and the power-seeking *tycoon*. Three more categories were additionally discerned. Whereas the *spendthrift* manages depressive moods and feelings of rejection by spending money, the *bargain hunter* has a compulsion to buy things for less or else anger and depression will set in. The *gambler*, finally, thrives on the feeling of excitement and suspense when engaging in a game of chance for something of value.

There have been a number of psychometrically based attempts to measure money attitudes among people in general. Yamauchi and Templer (1982) constructed the Money Attitude Scale (MAS) from an original set of 62 items, of which 34 emerged, defining five factors. Two of the factors correspond to views on money as compelled mainly by the power and status that is associated with wealth, or the obsessive need to save. More precisely, items loading on the factor for *Power-Prestige* pointed to the use of money as a symbol of success to impress and influence others. Items loading on the factor for *Retention-Time* correspond to careful spending behavior and meticulous planning of monetary resources to get a sense of security. Items loading on two of the remaining factors pertain more clearly to emotion-laden aspects. The factor titled *Distrust* was interpreted as reflecting suspicion and doubt in situations involving money, and the other factor entitled *Anxiety* was taken to reflect distress and worry over money matters. The fifth factor related to the concern with paying for quality as a consumer. As Yamauchi and Templer dropped the latter factor, the final scale consisted of 29 items. Their scale has been studied in several papers (Gresham & Fontenot, 1989; Medina, Saegert, & Gresham, 1996; Roberts & Sepulveda, 1999; Yang & Lester, 2002) and has been found to have acceptable reliability. Furthermore, Roberts and Sepulveda (1999) replicated the finding that money attitudes are essentially independent of income, as originally found in the study by Yamauchi and Templer. An analogous finding is that income was shown to be a poor predictor when examining emotional and behavioral correlates of money pathology (Furnham & Okamura, 1999).

Furnham (1984) developed the Money Beliefs and Behavior Scale (MBBS) partly for the purpose of investigating the relationship between demographic variables and monetary beliefs. There is some overlap between MAS and the MBBS. Both scales yield dimensions that relate to, on the one hand, perceiving money as a symbol of power, status, or prestige, and on the other hand, budgeting or retaining money. The MBBS also yields a dimension relating to the obsession with money, which in the MAS is a component of the Power-Prestige factor. Using the MBBS, it was further found that obsession with money decreased with higher education, which is a finding that has been replicated by Lynn (1991). When including some of the items of the MBBS in a study on national differences in money attitudes over 43 countries, Lynn found that people in more affluent countries tended to attach less value to money. A negative relation was found between the valuation of money and per capita income among people in most nations. By contrast, Diener (2000) has suggested that beyond a GNP per capita of around 8,000 U.S. dollars, the association disappears between wealth and social satisfaction.

There is another scale that has been developed for the purpose of measuring money attitudes. This is the Money Ethic Scale as developed by Tang (1992). It does not overlap to the same extent with the previously discussed scales; however, it has elucidated the relation between money perceptions, stress, and work-related attitudes. The scale has six major factors and two of these are very similar to the factors relating to, on the one hand, power associated with wealth, and on the other hand, budgeting behavior. The remaining factors pertain to perceptions of money as good and evil, a sign of achievement and a possibility to enjoy other people's respect. Tang (1992) found that the endorsement of money as a means to gain power was associated with lower satisfaction with work, income, and co-workers as well as overall life satisfaction. In a later study by Tang (1995), it was found that the view of money as good tended to be related to careful budgeting and low organizational stress.

Taken together, individual differences in money attitudes have mainly been investigated with respect to related beliefs and behavior and demographics. Our review, however, strongly suggests that attitudes about money seem to be determined by the ability to manage emotion-related issues, as encountered both in the social and professional realms. EI is for this reason a potentially useful concept in order to study the extent that individual differences in money attitudes may be explained by emotional competence.

Emotional Intelligence

EI is currently measured in two different ways: as performance and as self-report. The former approach was the initial thrust when launched by Salovey and Mayer (1990). They defined EI as a cognitive ability to identify, process, and manage emotions. Their research has led them to refine their definition of EI as an ability (Mayer & Salovey, 1997) that is embodied in the overall intelligence structure (Mayer, Salovey, Caruso, & Sitarenios, 2001) and their work continues to be based on performance measures (e.g., Mayer, Perkins, Caruso, & Salovey, 2001). These measures are derived from, amongst other things, the identification and judging of emotions as shown in pictures of facial expressions. This is a skill that corresponds to a basic component in the overall ability underlying EI (Mayer & Salovey, 1997). There are different procedures for scoring correct judgments of perceived emotions. A common procedure is consensual scoring, which means that observations from a large sample of people are pooled. The most common answer that is given in the sample is taken as the correct response.

The work by Mayer and Salovey inspired alternative conceptualizations that rely on established psychological concepts pertaining to traits as discerned in cross-situational consistencies in behavior (Bar-On, 2000; Goleman, 1995; Petrides & Furnham, 2001; Schutte et al., 1998). The latter approach draws heavily on self-reports for assessing personality variables or disposition. This approach will be discussed in reference to concepts included in the present study, *viz.* empathy, emotional stability, self-actualization and resilience.

In their original formulation, Salovey and Mayer (1990) postulated that empathy was part of one of the primary domains of EI, and empathy has been found to relate rather strongly ($r = .43$) to the Mayer and Salovey Emotional Intelligence Test (MEIS, Mayer, Caruso, & Salovey, 1999). Furthermore, empathy, when defined as vicarious responding to another person (Katz, 1963), has been shown to be involved in the ability to accurately perceive emotions as experienced by others in the immediate environment (Engelberg & Sjöberg, 2003a).

According to Mayer and colleagues, self-management with regard to emotions is another crucial part of EI (Mayer & Salovey, 1997; Mayer, Salovey, Gomberg-Kaufman, & Blainey, 1991; Mayer, Salovey, & Caruso, 2000). Self-reports of EI usually, therefore, include some aspect of emotional stability. For instance, there are corresponding concepts of the Revised NEO Personality Inventory (Costa & McCrae, 1992) in the formulations by Bar-On (1997) and Goleman (1995).

Alternative formulations further include aspects of assertiveness and ability to motivate oneself that are reminiscent of psychological constructs such as self-actualization. Self-actualization has been found, within the Bar-On conceptual framework of EI (Bar-On, 2000), to tap a general achievement drive and a desire to work toward personal goals (Dawda & Hart, 2000). Another trait that should be related to a high degree of achievement drive is resilience, or stamina to persist in the face of different challenges. It has been argued that resilience is to be conceived of as an EI-related characteristic when defined as an adaptive skill to deal with stressful circumstances (Saarni, 1997, 1999).

As pointed out by Matthews, Zeidner, and Roberts (2001), there is an important difference between the two measurement approaches that pertains to response bias. Actual ability is not entirely reflected in self-reports (e.g., Ciarrochi, Deane, & Anderson, 2002), because people often tend to embellish their personal qualities. Performance-based tests are similar to tests of traditional intelligence free of such bias. As a result, self-reports tend to be related to well-established personality traits (see e.g., Davies, Stankov, & Roberts, 1998), and performance measures of EI tend to share overlap with traditional intelligence measures (e.g., Roberts, Zeidner,

& Matthews, 2001). This difference in measurements should account for findings of low correlations between self-reports and performance measures of EI (e.g., Otto, Doering-Seipel, Grebe, & Lantermann, 2001). For instance, very few of the different scales of the PF16 were found to relate in a significant manner with the MEIS (see Mayer, Caruso, & Salovey, 2000).

As long as there are two research traditions based on different conceptualizations of the phenomenon, it is presumably erroneous to consider EI as a unitary concept. Mayer and colleagues, who pioneered the research on EI, adhere to their definition of EI as a mental ability to process, understand and manage emotions as perceived in self and in others. The overall net effect is the capacity to exert effective control over one's emotional life. Other researchers in the field of EI do not focus to the same degree on emotions as a source of information that has the potential to guide one's thinking and actions. Instead, their work chiefly aims at finding a precise combination of traits that ultimately will correspond to an emotionally intelligent disposition. EI has, consequently, been specified as the ability to motivate oneself to achieve in one's profession (Boyatzis, Goleman, & Rhee, 2001), or as a disposition that improves collaboration in the workplace by building group trust and efficacy (Druskat & Wolff, 2001).

The Relation Between Money Attitudes and EI

The alleged competence underlying EI should have a bearing on individual attitudes toward money. This assumption springs from the general finding that there are emotion-laden connotations related to the notion of money, and that negative feelings are mainly associated with a lack of self-efficacy in handling personal economic issues. EI is essentially defined as involving a more efficient processing and management of emotions (Mayer, Salovey, & Caruso, 2000). Alternatively, the concept could, as suggested by Izard (2001), be viewed as an ability to adapt to emotion-eliciting circumstances. A more robust ability to adapt in this respect should entail an advantage in coping with emotions evoked by economic issues, and may be prevalent among individuals who successfully manage personal issues related to money.

An adaptive ability of this kind is perhaps linked to a tendency to downplay economic values, as found among respondents of high EI in a study by Sjöberg (2001a). The respondents varied greatly in demographics and were reasonably representative of the general Swedish population. Another possibility would, therefore, be that EI is linked to a value structure in which money is not of prime importance. This conjecture seems at first somewhat counter-intuitive because most management literature deals with

money as a means to affect motivation and performance (Ferris, Rosen, & Barnum, 1995). In their assumption of money as an extrinsic motivator, researchers, however, tend to neglect the individual variation in the importance attached to money *per se*. As already discussed, scales for measuring money attitudes all yield a prominent factor interpreted as money being valued as a means to gain prestige and power, as well as to impress others. Such a value structure should implicitly include the perception of money as a powerful extrinsic motivator.

Other research suggests that personal strivings for power, prestige, and the ability to impress others give rise to distress (e.g., Emmons, 1991) and a generally lower well being (e.g., Kasser & Ryan, 1993; Richins & Dawson, 1992; Sirgy, 1998). There are several possible explanations for the relation between strong money motives and lower well being. As prompted by the work of Tang (1993), one plausible explanation may be that strong money motives decrease a sense of autonomy that is usually associated with intrinsic motivation (Deci & Ryan, 1985). When using the Money Ethic Scale on a sample of Chinese students, it was found by Tang that those who valued money felt that they were controlled by external factors and expressed a higher degree of stress symptoms. Other findings imply that a sense of individual control may forestall negative affect as elicited by money matters (e.g., Brief, Brett, Raskas, & Stein, 1997). For instance, less anxiety was experienced among American consumers who reported strong feelings of control over their money (McClure, 1984). Another study revealed that a generalized sense of control mediated and moderated the linkage between financial strain and depressive symptoms, even after controlling for socio-demographic variables (Chou & Chi, 2001).

Another possible explanation for the relation between money obsession and lower well-being is that the pursuit of money is considered so important that there is not enough time to spend with friends or family, and on leisure activities. Although this may well reflect a conscious choice, the resulting lack of life adjustment may eventually give rise to deterioration in well-being (cf. Hobson, Delunas, & Kesic, 2001; Stanton-Rich & Iso-Ahola, 1998). Given that money is not of prime importance to emotionally intelligent people, this could be the most plausible explanation. Previous work of ours has shown that people high in EI are better adjusted socially in the sense that they experience less conflicting demands on their time between work and family and/or leisure (Sjöberg, 2001a).

To sum up, the present study investigated the relation between money attitudes and EI-related concepts. The issues under investigation were the importance attached to money, and life adjustment. EI was assessed with the above mentioned performance and self-report measures, and money attitudes were assessed by means of MAS. MAS was considered to be

particularly useful in the present study since the scale seems to capture affective aspects associated with money. More precisely, our analysis was based on two indices of money attitudes. One index consisted of the items of the following factors of MAS: Power-Prestige, Distrust, and Anxiety. Another index consisted of the items of the Retention factor.

There were several reasons that warranted the special treatment of the Retention items. First, these items assess monetary behavior that by most standards would be considered as rational, i.e., careful use of money and planning for one's financial future. This aspect diverges in substance from the psychological and emotional money-related connotations that are reflected in the remaining items of MAS. Second, prior research indicates that budget-minded individuals do not tend to perceive money as a symbol of power/prestige (Furnham, 1984), and do not tend to associate money with anxiety and stress (Tang, 1993, 1995). Third, prior research has further shown that budget-minded individuals are less prone to excessive spending and have less favorable attitudes toward borrowing money than people who endorse items reminiscent of those of the Power-Prestige factor (e.g., Heath & Soll, 1996; Lea & Webley, 1995; Watson, 2003).

Based on previous research on money attitudes and EI, we formulated two hypotheses for the present study:

H1: High orientation toward money is linked to low EI.

H2: Low money orientation is linked to a high degree of life adjustment.

Method

Participants

Participants were applicants to the Stockholm School of Economics (SSE) who were offered to take an entrance test after being notified that they had not been admitted through the regular procedure. Every academic year, nine tenths of the applicants were accepted in the order of highest school grades or score on a test of intellectual ability. Remaining applicants above a specific GPA or score on a test of intellectual ability were invited to the SSE in order to take an entrance test that will allow another thirty applicants to enroll. The invitation contained information that the test would take approximately six hours, and that it was about personality, as well as emotional and social skills important to vocational success. Participants were informed that the collected data would also be used for research. The

present analysis was based on 212 respondents (137 men, 75 women) who were tested simultaneously. The average age was 20.5 years ($SD = 2.49$).

Questionnaire

The Money Attitude Scale. The scale used to measure money attitudes consisted of the 29 items of the MAS (Yamauchi & Templer, 1982). Items of the Power factor include, for example: "Although I should judge the success of people by their deeds, I am more influenced by the amount of money they have," and the Retention factor includes items, such as "I follow a careful financial budget." Items of the Distrust factor include: "When I make a major purchase, I have the suspicion that I have been taken advantage of," and that of the Anxiety factor: "I worry that I will not be financially secure." Responses were recorded on a 7-point Likert-type scale with "never" and "always" as end points. The instruction was to rate the extent to which each statement was an accurate description of common thoughts, feelings, and behavior on the part of the respondent.

Economic self-perceptions. Perception of self as an economic actor was measured with ten items.² The following two items were included in the analysis of the present study: "Do you consider yourself to be in control of your expenses?" and "How able do you consider yourself to be when it comes to managing your money?" Responses were recorded on a 5-point Likert-type scale for questions.

Measures of Emotional Intelligence. EI was measured by, on the one hand, a performance measure and, on the other hand, self-report scales. The performance measure has been used in our previous research (Engelberg & Sjöberg, 2003a, b; Sjöberg, 2001b, c) and consists of showing photographs of faces from the Lightfoot series of facial emotion expressions (Engen, Levy, & Schlosberg, 1957). Respondents were asked to judge, on a set of scales, which emotions were expressed by each face. The judgments were scored according to the principle for consensual scoring, i.e., the most common response was taken to define the correct response. The alpha value for the facial expressions scale scored in this manner was 0.69 (for information on validity, see Sjöberg, 2001a).

Self-report scales measuring empathy, emotional stability, self-actualization, and resilience were used. These are concepts that may be considered to be sub-scales of EI. First, the instrument developed by Mehrabian and Epstein (1970, $\alpha = 0.75$) was used to measure Empathy. It consists of 33 items, for example: "I tend to get emotionally involved with friends'

²A copy of the scale can be obtained from the authors upon request.

problems,” and responses are recorded on an eight-point bipolar scale. Second, Emotional Stability (Hendriks et al., 1999, $\alpha = 0.82$) was measured with 16 items, for example: “I have a very weak sense of self confidence.” Third, Self-Actualization was measured by the Jones and Crandall scale (1986, $\alpha = 0.67$). It consists of 15 items, for example: “It is better to be yourself than popular,” and responses are recorded on a four-point scale. Fourth, Resilience (Sjöberg & Littorin, 2003, $\alpha = 0.86$) was measured with 24 items, for example: “Failure seldom has any effect on me,” and responses were recorded on a four-point scale.

Life Adjustment. Life/work balance was assessed by two subscales (Sjöberg, 2001a). These scales were work interfering with leisure/family ($\alpha = 0.91$, 11 items) and leisure/family interfering with work ($\alpha = 0.88$, 6 items), for example: “Demands from my family interfere with my work.”

Results

A combined measure of money attitudes was calculated by adding the responses to the items measuring Power-Prestige, Distrust, and Anxiety (Cronbach's $\alpha = .80$). The combined score is an index of the importance attached to money, or Money Orientation. The scale responses to the items of the Retention factor were added to form one index (Cronbach's $\alpha = .68$) of the behavior involved with budgeting and saving money.

Inter-correlations between the combined money attitude measure, the Retention factor, the EI indices, measures of EI Performance, and Life Adjustment, are given in Table 1.

The measure for Money Orientation was run as the dependent variable in a regression analysis with the EI-related self-report indices, the measures of EI performance, and Life Adjustment as independent variables. The analysis produced a significant result, $F(6, 205) = 10.80$, $R^2 = .24$, $p < .0001$; hence, about a quarter of the variance of the combined measure of money attitudes was explained by the independent variables. Standardized regression coefficients are presented in Table 2. These suggested that EI Performance, Life Adjustment and Self Actualization, all contributed toward the explanation of the combined measure of money attitudes.

The measure for Retention was run as the dependent variable in another regression analysis with the same independent variables as above. The analysis gave marginally significant result, $F(6, 205) = 2.38$, $R^2 = .07$, $p = .03$. Standardized regression coefficients are presented on the right-hand side of Table 2. These results show that Self Actualization made a modest contribution toward the explanation of the Retention Factor, and that EI Performance also made a marginally significant contribution.

Table 1

Inter-Correlations Between Money Orientation, Retention, Performance and Self-Report Measures of Emotional Intelligence, and Life Adjustment

	1	2	3	4	5	6	7	8
1. Money orientation	—							
2. Retention of money	-.05	—						
3. Facial expressions	-.23	.12	—					
4. Empathy	-.24	.03	.16	—				
5. Emotional stability	-.26	.17	.02	.11	—			
6. Self actualization	-.38	.21	.06	.32	.60	—		
7. Resilience	-.28	.15	.05	.22	.77	.65	—	
8. Life adjustment	-.37	.10	.15	.21	.36	.45	.38	—

On the basis of the measure for Money Orientation, the sample was divided at the median into two groups differing in levels of importance attached to money. Mean values for the performance and self-report measures of EI, and Life Adjustment, were converted into standardized scores and subjected to *t*-tests. T-testing revealed significant differences between

Table 2

Standardized Regression Coefficients for Performance and Self-Report Measures of Emotional Intelligence, and Life Adjustment, with Money Orientation as the Dependent Variable on the Left-Hand Side, and with Retention as the Dependent Variable on the Right-Hand Side

	Money orientation			Retention of money		
	Beta	t	p	Beta	t	p
Facial expressions	-.18	-2.87	.01	.12	1.80	.08
Empathy	-.01	-.14	.89	-.05	-.72	.47
Emotional stability	-.09	-.96	.33	.09	.82	.41
Self actualization	-.22	-2.58	.01	.20	2.10	.05
Resilience	-.02	-.19	.84	-.04	-.38	.70
Life adjustment	-.19	-2.78	.01	.01	-.17	.86

Table 3

Standardized Scores of Performance and Self-Report Measures of Emotional Intelligence and Life Adjustment, in Two Groups of Levels Denoting Money Orientation and Two Groups Denoting Levels of Retention

	Money orientation		Retention of money	
	Low	High	Low	High
Facial expressions	.18 (0.80)	-.18 (1.14)**	-.06 (0.94)	.06 (1.05)
Empathy	.15 (0.93)	-.15 (1.05)*	-.02 (0.83)	.02 (1.15)
Emotional stability	.25 (0.75)	-.25 (1.15)***	-.15 (0.87)	.15 (1.09)*
Self actualization	.33 (0.87)	-.33 (1.01)***	-.17 (0.96)	.17 (1.01)*
Resilience	.30 (0.84)	-.30 (1.06)***	-.15 (0.97)	.15 (1.01)*
Life adjustment	.27 (0.91)	-.27 (1.01)***	-.01 (0.93)	.01 (1.06)

* $p < .05$. ** $p < .01$. *** $p < .0001$.

the two groups for all of the variables: Facial Expressions, $t = 2.67$, $p < .01$; Empathy, $t = 2.26$, $p = .03$, Emotional Stability, $t(df = 1, 210) = 3.83$, $p < .0001$, Self Actualization, $t = 5.23$, $p < .0001$, Resilience, $t = 4.56$, $p < .0001$, and Life Adjustment, $t = 4.06$, $p < .0001$. Standardized scores are presented in Table 3, and show that respondents with a low level of money orientation tended to a greater degree to be endowed with a high level of EI and related characteristics. The effects are small to moderate, with an average of 0.49 in terms of standard deviation units. According to Cohen's (1988) often used norms, this is a medium size effect.

The score for Retention was similarly divided by means of the median into two groups differing in levels of budgeting money. T-testing revealed significant differences for Emotional Stability, $t(df = 1, 210) = -2.32$, $p = .03$, Self Actualization, $t = -2.54$, $p = .02$, and Resilience, $t = -2.30$, $p = .03$. Standardized scores are presented on the right-hand side of Table 3. These suggest that respondents characterized by high levels of budgeting money tended to be somewhat more stable emotionally, more geared toward self actualization and better able to resist failure. These effects were smaller, however, than those pertaining to Money Orientation.

The items of economic self-perceptions were subjected to a correlation analysis with the measures of EI and Life Adjustment. Results revealed that all measures, except for Empathy ($r = .01$), related positively to sense of financial control: Facial Expressions, $r = .18$, $p < .01$; Emotional Stability, $r = .20$, $p < .01$; Self Actualization, $r = .31$, $p < .0001$; Resilience, $r = .20$,

$p > .01$; and Life Adjustment, $r = .19$, $p < .01$. These results suggested that respondents who were endowed to a higher degree with EI-related qualities had a firmer sense of control over their money.

The perception of self as able to manage money related positively to Emotional Stability, $r = .18$, $p < .01$; self actualization, $r = .28$, $p < .0001$; and Resilience, $r = .20$, $p < .01$, suggesting that more emotionally stable, achievement-oriented and resilient respondents felt confident in their ability for money management. There were no significant correlations between the remaining constructs and money management (Facial Expressions, $r = .06$; Empathy, $r = .02$; Life Adjustment, $r = .13$).

Discussion

The aim of the present study was to investigate the extent to which money attitudes vary as a function of EI. A pronounced orientation toward money was expected to relate negatively to performance and self-report measures of EI. The concept of life adjustment was analyzed in relation to money orientation on the basis of a previous finding that people of high EI tend to give more equal priority to work and family/leisure than those low in EI. It was therefore expected that low money orientation would relate positively to life adjustment.

The sample studied here was restricted in terms of age, interest for higher education, occupational focus, and nationality. Yet, the results agree well with another study that investigated a more broadly representative group from the general population (Sjöberg, 2001a). The results also agree well with the literature on money attitudes and on emotional intelligence.

Regression analysis showed that EI measures explained a fair proportion of the variance in Money Orientation. More precisely, the performance measure/Facial Expressions and self actualization were both shown to contribute in a significant direction toward the explanation of Money Orientation. These results suggest that both conceptualizations of EI are useful to further our understanding of the relation between money attitudes and emotion competence, in spite of a lack of overlap found between these two measures.

Our analyses show that retaining and budgeting money was not as clearly related to EI-related qualities. Self actualization related positively to Retention only to a modest degree, as shown by the regression analysis. T-testing suggested that budget-conscious respondents tended to be only somewhat more achievement-oriented, resilient, and emotionally stable. This finding is consistent with research that has shown that achievement drive, resilience, and emotional stability facilitate the ability to delay gratification of future consumption (cf. Metcalfe & Mischel, 1999).

The present results thus suggest that EI is of greater value for explaining individual differences in money orientation, or the importance attached to money and concomitant associations of negative affect, than for explaining behavior involving the retention and budgeting of money.

Overall results suggested that our hypotheses were confirmed. As for the first hypothesis, it was shown that emotionally intelligent individuals valued money less as a sign of power, status, and prestige. When measuring EI primarily as a cognitive ability, results suggested that the concept was linked to a low degree of Money Orientation. Less money-oriented respondents were more accurate when identifying emotions from facial expressions and somewhat more emphatic, as well as better adjusted socially. This finding is consistent with our previous research that a more accurate perception of emotion in others is closely related to empathy and that these two variables, in turn, are related to a high degree of life adjustment (Engelberg & Sjöberg, 2003a). When measuring EI specifically as a disposition, results further suggested that low money orientation was linked to high EI, as will be discussed next with a focus on economic self-efficacy.

Less money-oriented respondents were found to be more stable emotionally, geared toward achievement, and better able to withstand failure and deal efficiently with demanding challenges. Apparently, an ability to adapt to potentially emotion-eliciting demands (Izard, 2001) seems to extend into a greater efficacy in dealing with issues involving money. The three self-report measures were also found to relate to the perception of self as an able money manager with a good sense of financial control, which further points to a higher degree of economic self-efficacy in this group of respondents. Interestingly, the measure of EI performance/Facial Expressions was found to relate to perceptions of self as someone who has a firm sense of financial control. As performance tests are considered to provide true and undistorted measures of actual ability (Ciarrochi et al., 2002; Sjöberg & Engelberg, 2004), this result adds some strength to the conclusion that pronounced money orientation is less prevalent among emotionally intelligent people.

Furthermore, the results imply that the achievement drive usually ascribed to people of high EI (Boyatzis et al., 2001) does not emanate from a motive to acquire money for its symbolic meaning of power, prestige, and status. It could mean that a higher degree of intrinsic motivation could be found among emotionally intelligent people.

Our final hypothesis was also confirmed, as results showed that a low importance attached to money is linked to a high degree of life adjustment. The regression analysis showed that the measure of Life Adjustment made a negative contribution toward the explanation of Money Orientation. This result suggested that less money-oriented persons are more inclined to give an equal priority to work and leisure, which has been shown to also be the

case with people of high EI (Sjöberg, 2001a). The negative contribution of EI Performance/Facial Expressions, as revealed by the same regression analysis, suggested that a more accurate perception of others' emotions is concomitant with social involvement among less money-oriented people. A relaxed and more confident attitude toward money seems in other words to be linked to a broader social integration, presumably because of a more acute ability to perceive and process emotional information.

The results similarly suggested that respondents with a penchant for money seem to be less attuned to the social environment. As Money Orientation includes aspects of anxiety and distrust of others, this result is consistent with the essence of the different taxonomies of money behavior (Forman, 1987; Goldberg & Lewis, 1978). Money-oriented people tend to prioritize work over social engagements, because to these individuals it is money, and not a social network, that represents a buffer, support, or a sense of security. It is however unclear whether a high level of money orientation emanates from less proficient skills to engage in social relations or from the actual choice not to socialize extensively. Nonetheless, this line of reasoning leads to the suggestion that future studies on EI should explore social competence, or social intelligence (Kihlstrom & Cantor, 2000) as a theoretically related concept.

Acknowledgment

This study was supported by a grant from the Stockholm School of Economics.

References

- Bailey, W., & Lown, J. M. (1993). A cross-cultural examination of the aetiology of attitudes towards money. *Journal of Consumer Studies and Home Economics*, 17, 391-402.
- Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory (EQ-i): Technical manual*. Toronto, Canada: Multi-Health Systems.
- Bar-On, R. (2000). Emotional and social intelligence: Insights from the Emotional Quotient Inventory. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional intelligence* (pp. 363-388). San Francisco, CA: Jossey-Bass.
- Boyatzis, R. E., Goleman, D., & Rhee, S. R. (2001). Clustering competence in emotional intelligence. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of emotional intelligence* (pp. 343-362). San Francisco, CA: Jossey-Bass.

- Brief, A., Brett, J. F., Raskas, D., & Stein, E. (1997). Feeling economically dependent on one's job: Its origins and functions with regard to worker well-being. *Journal of Applied Social Psychology, 27*, 1303-1315.
- Burgogne, C. (1990). Money in marriage. *Sociological Review, 38*, 634-665.
- Chou, K.-L., & Chi, I. (2001). Financial strain and depressive symptoms in Hong Kong elderly Chinese: The moderating and mediating effect of sense of control. *Aging & Mental Health, 5*, 23-30.
- Ciarrochi, J., Deane, F., & Anderson, S. (2002). Emotional intelligence moderate the relationship between stress and mental health. *Personality and Individual Differences, 32*, 197-209.
- Cohen, J. (1988). *Statistical power analysis for behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Conger, R. D., Ge, X., Elder, G. H., & Lorenze, F. O., et al. (1994). Economic stress, coercive family process, and developmental problems of adolescents. *Child Development, 65*, 541-561.
- Costa, P. T., & McCrae, R. (1992). *NEO PI-R professional manual*. Odessa, Florida: Psychological Assessment Resources.
- Davies, M., Stankov, L., & Roberts, R. D. (1998). Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology, 75*, 989-1015.
- Dawda, R., & Hart, S. D. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-i) in university students. *Journal of Personality and Individual Differences, 28*, 797-812.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deutsch, F. M., Roksa, J., & Meeske, C. (2003). How gender counts when couples count their money. *Sex Roles, 48*, 291-304.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist, 55*, 34-43.
- Druskat, V. U., & Wolff, S. B. (2001). Group emotional intelligence and its influence on group effectiveness. In C. Cherniss & D. Goleman (Eds.), *The Emotionally Intelligent Workplace* (pp. 132-155). San Francisco, CA: Jossey-Bass.
- Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Maszk, P., Smith, M., O'Boyle, C., & Suh, K. (1994). The relations of emotionality and regulation to dispositional and situational empathy-related responding. *Journal of Personality and Social Psychology, 66*, 776-797.
- Emmons, R. A. (1991). Personal strivings, daily life events, and psychological and physical well-being. *Journal of Personality, 59*, 453-472.
- Engelberg, E., & Sjöberg, L. (2003a). Emotional intelligence, affect intensity and social adjustment. *Personality and Individual Differences* (in press).

- Engelberg, E., & Sjöberg, L. (2003b). Internet use, social skills and adjustment. *Cyberpsychology and Behavior* (in press).
- Engen, T., Levy, N., & Schlosberg, H. (1957). A new series of facial expressions. *American Psychologist*, *12*, 264-266.
- Ennis, N. E., Hobfoll, S. E., & Schroeder, K. E. E. (2000). Money doesn't talk, it swears: How economic stress and resistance resources impact inner-city women's depressive mood. *American Journal of Community Psychology*, *28*, 149-173.
- Ferris, G. R., Rosen, S. D., & Barnum, D. T. (Eds.) (1995). *Handbook of Human Resource Management*. Cambridge, MA: Blackwell.
- Forman, N. (1987). *Mind over Money*. Toronto: Doubleday.
- Furnham, A. (1984). Many sides to the coin: The psychology of money usage. *Personality and Individual Differences*, *5*(5), 501-509.
- Furnham, A. (1996). Attitudinal correlates and demographic predictors of monetary beliefs and behaviors. *Journal of Organizational Behavior*, *17*, 375-388.
- Furnham, A., & Argyle, M. (1998). *The Psychology of Money*. Florence, KY: Taylor & Francis/Routledge.
- Furnham, A., & Okamura, R. (1999). Your money or your life: Behavioral and emotional predictors of money pathology. *Human Relations*, *52*, 1157-1177.
- Gilbert, D. T., Fiske, S. T., & Lindzey, G. (Eds.) (1998). *The Handbook of Social Psychology* (Vols. I and II). Boston: McGraw-Hill.
- Goldberg, H., & Lewis, R. (1978). *Money Madness: The Psychology of Saving, Spending, Loving and Hating Money*. London: Springwood.
- Goleman, D. (1995). *Emotional intelligence: why it can matter more than IQ*. London: Bloomsbury.
- Gresham, A., & Fontenot, G. (1989). The differing attitudes of the sexes toward money: An application of the money attitude scale. *Advances in Marketing*, *0*, 380-384.
- Harvey, S. M., Beckman, L. J., Browner, C. H., & Sherman, C. A. (2002). Relationship power, decision making, and sexual relations: An exploratory study with couples of Mexican origin. *Journal of Sex Research*, *39*, 284-291.
- Heath, C., & Soll, J. (1996). Mental budgeting and consumer decisions. *Journal of Consumer Research*, *23*, 40-52.
- Hendriks, A. A. J., Hofstee, W. K. B., & DeRaad, B. (1999). The Five-Factor Personality Inventory (FFPI). *Personality and Individual Differences*, *27*, 307-325.
- Hobson, C. J., Delunas, L., & Kesic, D. (2001). Compelling evidence of the need for corporate work/life balance initiatives: Results from a national survey of stressful life-events. *Journal of Employment Counseling*, *38*, 38-44.

- Izard, C. (2001). Emotional Intelligence or adaptive emotions? *Emotion, 1*, 249-257.
- Jones, A., & Crandall, R. (1986). Validation of a short index of self-actualization. *Personality and Social Psychology Bulletin, 12*, 63-73.
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American Dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology, 65*, 410-422.
- Katz, R. L. (1963). *Empathy: Its nature and uses*. London: Free Press of Glencoe.
- Kihlstrom, J. F., & Cantor, N. (2000). Social intelligence. In R. J. Sternberg (Ed.), *Handbook of Intelligence* (pp. 380-395). Cambridge, U.K.: Cambridge University Press.
- Kirkcaldy, B., & Furnham, A. (1993). Predictors about beliefs about money. *Psychology Reports, 73*, 1079-1082.
- Lea, S., & Webley, P. (1995). Psychological factors in consumer debt: Money management, economic socialization, and credit use. *Journal of Economic Psychology, 16*, 681-701.
- Lynn, R. (1991). *The Secret of the Miracle Economy*. London: Social Affairs Unit.
- McClure, R. (1984). The relationship between money attitudes and overall pathology. *Psychology, 21*, 4-6.
- Mates, D., & Allison, K. R. (1992). Sources of stress and coping responses of high school students. *Adolescence, 27*, 461-474.
- Matthews, G., Zeidner, M., & Roberts, R. (2002). *Emotional Intelligence: Science and Myth*. Cambridge, MA: The MIT Press.
- Mayer, J. D., Salovey, P., Gombert-Kaufman, S., & Blainey, K. (1991). A broader conception of mood experience. *Journal of Personality and Social Psychology, 60*, 100-111.
- Mayer, J., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence* (pp. 3-31). New York: Basic Books.
- Mayer, J. D., Caruso, D.R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence, 27*, 267-298.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2000). Selecting a measure of emotional intelligence: The case for ability scales. In R. Bar-On & J. D. A. Parker (Eds.), *The Handbook of Emotional Intelligence: Theory, Development, Assessment, and Application at Home, School and in the Workplace* (pp. 320-342).
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2000). Emotional Intelligence as Zeitgeist, as Personality, and as a Mental Ability. In R. Bar-On & J. D. A. Parker (Eds.), *The Handbook of Emotional Intelligence: Theory,*

- Development, Assessment, and Application at Home, School and in the Workplace* (pp. 92-117).
- Mayer, J. D., Perkins, D. M., Caruso, D. R., & Salovey, P. (2001). Emotional intelligence and giftedness. *Roeper Review*, 23, 131-137.
- Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. *Emotion*, 1, 232-242.
- Medina, J. F., Saegert, J., & Gresham, A. (1996). Comparison of Mexican-American and Anglo-American attitudes toward money. *The Journal of Consumer Affairs*, 30, 124-145.
- Mehrabian, A., & Epstein, N. (1970). A measure of emotional empathy. *Journal of Personality*, 40, 525-543.
- Metcalfe, J., & Mischel, W. (1999). A hot/cool-system analysis of delay of gratification: Dynamics of willpower. *Psychological Review*, 106(1), 3-19.
- Newcomb, M., & Rabow, J. (1999). Gender, socialization, and money. *Journal of Applied Social Psychology*, 29, 852-869.
- O'Connell, M. (2003). Farily satisfied: Economic equality, wealth and satisfaction. *Journal of Economic Psychology*, (in press).
- Otto, J. H., Doering-Seipel, E., Grebe, M., & Lantermann, E.-D. (2001). Entwicklung eines Fragebogens zur Erfassung der wahrgenommenen emotionalen Intelligenz. Aufmerksamkeit auf, Klarheit und Beeinflussbarkeit von Emotionen./Development of a questionnaire for measuring perceived emotional intelligence: Attention to, clarity, and repair of emotions. *Diagnostica*, 47, 178-187.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, 15, 425-448.
- Prince, M. (1993). Self-concept, money beliefs and values. *Journal of Economic Psychology*, 14, 161-174.
- Richins, M. L., & Dawson, S. (1992). A consumer value orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19, 303-316.
- Roberts, J. A., & Sepulveda, C. J. M. (1999). Demographics and money attitudes: A test of Yamauchi & Templer's (1982) money attitude scale in Mexico. *Personality and Individual Differences*, 27, 19-35.
- Roberts, R., Zeidner, M., & Matthews, G. (2001). Does emotional intelligence meet traditional standards for an intelligence? Some new data and conclusions. *Emotion*, 1, 196-231.
- Rubinstein, C. (1980). Your money and your life. *Psychology Today*, 12, 47-58.
- Saarni, C. (1997). Coping with aversive feelings. *Motivation and Emotion*, 21, 45-63.

- Saarni, C. (1999). *The development of emotional competence*. New York: Guilford.
- Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition, and Personality*, 9, 185-211.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25, 167-177.
- Sirgy, M. J. (1998). Materialism and quality of life. *Social Indicators Research*, 43, 227-260.
- Sjöberg, L. (2001a). *Emotional intelligence and life adjustment: A validation study*. SSE/EFI Working Paper Series in Business Administration No. 2001:8. Stockholm: Stockholm School of Economics. http://swoba.hhs.se/hastba/abs/hastba2001_008.htm
- Sjöberg, L. (2001b). Emotional intelligence: A psychometric analysis. *European Psychologist*, 6(2), 79-95.
- Sjöberg, L. (2001c). *Emotional Intelligence measured in a highly competitive testing situation*. SSE/EFI Working Paper Series in Business Administration No. 2001:13. Stockholm: Stockholm School of Economics. http://swoba.hhs.se/hastba/abs/hastba2001_013.htm
- Sjöberg, L., & Engelberg, E. (2004). *Measuring and validating emotional intelligence as performance or self-report*. SSE/EFI Working Paper Series in Business Administration No. 2004:3. Stockholm: Stockholm School of Economics. http://swoba.hhs.se/hastba/abs/hastba2001_013.htm
- Sjöberg, L., & Littorin, P. (2003). *Emotional intelligence, personality and sales performance*. SSE/EFI Working Paper Series in Business Administration 2003:8. Stockholm: Stockholm School of Economics.
- Stanton-Rich, H. M., & Iso-Ahola, S. E. (1998). Burnout and leisure. *Journal of Applied Social Psychology*, 28, 1931-1950.
- Tang, T. (1992). The meaning of money revisited. *Journal of Organizational Behavior*, 14, 93-99.
- Tang, T. (1993). The meaning of money: extension and exploration of the money ethic scale in a sample of university students in Taiwan. *Journal of Organizational Behavior*, 14, 93-99.
- Tang, T. (1995). Attitudes toward money as related to intrinsic and extrinsic job satisfaction, stress and work-related attitudes. *Personality and Individual Differences*, 19, 327-332.
- Walker, R., & Garman, E. T. (1992). The meanings of money: Perspectives from human ecology. *American Behavioral Scientist*, 35, 781-789.
- Watson, J. J. (2003). The relationship of materialism to spending tendencies, saving, and debt. *Journal of Economic Psychology*, 24, 723-739.

- Wernimont, P., & Fitzpatrick, S. (1982). The meaning of money. *Journal of Applied Psychology, 56*, 218-221.
- Wilkinson, R. G. (1996). *Unhealthy societies: The afflictions of inequality*. London: Routledge.
- Yamauchi, K., & Templer, D. (1982). The development of a money attitude scale. *Journal of Personality Assessment, 46*, 522-528.
- Yang, B., & Lester, D. (2002). Internal consistency of the Yamauchi/Templer Money Attitude Scale. *Psychological Reports, 91*, 994.