A study of 207 faculty at a state university in the southeastern United States and 102 faculty members at the University of Valencia (Spain) examined demographic variables and attitudes toward money, income, and life satisfaction. Demographic variables (sex, age, education, marital status, race, current job experience, total work experience, and number of job changes) and money attitudes (using factors titled budget, evil, equity, success, and motivator) were used to predict self-reported income and life satisfaction. Using a five-point scale, participants rated their satisfaction with personal/family life and life as a whole. Multiple regression analyses showed that predictors of income for Americans were: age, equity, gender (male), budget, and education; for the Spanish sample, work experience, education, evil, and sex were predictors of income. In both samples, married professors reported higher life satisfaction. In measuring life satisfaction, other predictors for the American sample were intrinsic job satisfaction, success, sex, and level of education. For the Spanish sample predictors were extrinsic job satisfaction, and age. High income Spanish faculty tended to believe that money does not lead to unethical behavior and that money is not evil. Two appended tables provide statistical data; also appended is the money ethic scale used for measurement. (Contains 36 references.) (CH)
ATTITUDES TOWARD MONEY AND DEMOGRAPHIC VARIABLES
AS RELATED TO INCOME AND LIFE SATISFACTION:
USA VS. SPAIN

THOMAS LI-PING TANG
Middle Tennessee State University, Murfreesboro, TN 37132
TANG International, Franklin, TN 37064, USA

ROBERTO LUNA AROCAS
University of Valencia, Valencia, Spain

HAROLD D. WHITESIDE
Middle Tennessee State University, Murfreesboro, TN 37132, USA

Paper Presented at the 22nd Annual Conference of
the International Association for Research in Economic Psychology,
Valencia, Spain, September 15-18, 1997

Address all correspondence to Thomas Li-Ping Tang, PO Box 516, Department of
Management and Marketing, College of Business, Middle Tennessee State University,
Murfreesboro, TN 37132. Telephone: (615) 898-2005, Fax: (615) 898-5308, E-mail:
ttang@mtsu.edu.
ABSTRACT

People's attitudes toward money, income, and life satisfaction were collected from 207 university professors in the USA and 102 university professors in Spain. Demographic variables (sex, age, education, marital status, race, current job experience, total work experience, and the number of job changes) and money attitudes (Factors Budget, Evil, Equity, Success, and Motivator) were used to predict self-reported income and life satisfaction. Multiple regression results showed that for the American sample, age, Factor Equity, gender (male), Factor Budget, and education were predictors of income, while for the Spanish sample, work experience, education, Factor Evil, and sex were predictor of income. Moreover, for the American sample, intrinsic job satisfaction, marital status (married), Factor Success (low score), sex (female), and a low level of education were predictors of life satisfaction, for the Spanish sample, marital status, extrinsic job satisfaction, and young age were predictors of life satisfaction.

Key Words: Money Ethic, Demographic Variable, Income, Life Satisfaction, Cross Cultural
ATTITUDES TOWARD MONEY AND DEMOGRAPHIC VARIABLES
AS RELATED TO INCOME AND LIFE SATISFACTION:
USA VS. SPAIN

Money can be considered as the instrument of commerce and as the measure of value. Managers may use money to attract, retain, and motivate their workers. Although money is used universally, the meaning of money is in the eye of the beholder (McClelland, 1967). People's attitudes toward money are learned through the socialization process, established early in childhood, and maintained in adult life (Kirkcaldy & Furnham, 1993). Money attitudes may reflect their previous life experiences (Furnham, 1984; Wernimont & Fitzpatrick, 1972).

In the literature, money has been regarded as a motivator (Lawler, 1971). In America, money is how we keep score. “Income is used to judge success” (Rubenstein, 1981, p. 34). Workers' beliefs about money are also clearly related to their actual economic behavior. Most people in our societies work very hard for their money.

On the other hand, the discrepancy notion suggests that job or life satisfaction is a function of a comparison between what one receives (i.e., reality) and what one would like to receive (i.e., expectations) (Lawler, 1981). Thus, a lower level of desire for money may lead to a smaller discrepancy between the reality and the expectation which, in turn, may lead to higher life satisfaction. It has been suggested in the literature that “high pay alone will not lead to job (or life) satisfaction” (Work in America, 1973, p. xvi). Further, pay has been considered as a hygiene factor and not a (Herzberg, Mausner, & Snyderman, 1959). Moreover, there are three different types of relationship between work and leisure: spillover, compensatory, and no relationship (Parker, 1972; see Tang,
The results are mixed regarding the contribution of income to general life satisfaction.

The major purpose of this study is to identify demographic and attitudinal variables that are related to American and Spanish faculty members' self-reported income and general life satisfaction. More specifically, people's attitudes toward money as measured by the Money Ethic Scale will be examined.

**The Money Ethic Scale**

There are several measures of money attitudes in the literature (e.g., Burgogne, 1990; Fank, 1994; Forman, 1987; Furnham, 1984, Goldberg & Lewis, 1978; Luna Arocas, Quintanilla Pardo, & Diaz, 1995; Luna Arocas & Quintanilla Pardo, 1997; Lynn, 1991; McClure, 1984; Opsahl & Dunnette, 1966; Rubenstein, 1981; Tang, 1992, 1995; Tang & Kim, in press; Wernimont & Fitzpatrick, 1972; Yamauchi & Templer, 1982; Zelizer, 1989). In this study, we will use the Money Ethic Scale developed by Tang (1992, 1993, 1995; Tang & Kim, in press; Tang & Whiteside, 1997).

In a study of full-time employees, Tang (1992) identified six factors using the 30-item Money Ethic Scale. The six factors can be grouped into three major components: affective (Good and Evil), cognitive (Achievement, Respect, and Power), and behavioral (Budget) component. Tang (1992) found that age and sex (female) are positively related to Factor Budget. Thus, older people and females tend to use their money more carefully than their counterparts. Further, high income people tend to think that money represents their Achievement and money is not Evil. Young people tend to see money as Evil.

Factor Achievement is negatively correlated with satisfaction of work, promotion, supervision, and coworkers (cf. Smith, Kendall & Hulin, 1975) and overall life satisfaction.

The Short 12-item Money Ethic Scale (Tang, 1995) has three factors: Success, Budget, and Evil. Tang (1995) found that those who score high on the Short Money Ethic Scale tend to have high economic values (cf. Allport, Vernon, & Lindzey, 1970), low religious values, high Type A behavior pattern, to be older, to have low pay satisfaction, and high political values. Money Ethic endorsement also moderates the intrinsic job satisfaction-withdrawal cognition relationship and the intrinsic job satisfaction-voluntary turnover relationship (Tang & Tang, 1996).

Recently, Tang and Whiteside (1997) expanded and updated Tang's original Money Ethic Scale by examining the three factors (Budget, Evil, and Success) of the Money Ethic Scale (Tang, 1995) and other money-related attitudes in the literature. The rationale for the inclusion of these new items is provided as follows. Heneman (1992) found that males, white-collar employees, high performers, achievement-oriented employees, and those who already work under a merit plan tend to favor merit pay or the "equity" approach. Others may prefer the "egalitarian" or "equality" approach. Males allocate money differently based on their endorsement of the Money Ethic, whereas
females do not (Tang, 1996). Further, some people are highly motivated by money and consider money as a motivator (Lawler, 1971). Money sometimes can create an environment that may enhance unethical behaviors (Tang & Weatherford, 1997).

Tang and Whiteside (1997) collected data from 207 faculty of a regional state university located in the Southeastern United States, employed an exploratory factor analysis, and identified five factors (15 items). Factor Budget (4 items) dealt with how people budget and use their money. Factor Evil (4 items) was related to the notion that money is evil and money may enhance unethical behaviors. Factor Equity (3 items) was related to pay equity concerns in the compensation system. Factor Success (2 items) reflected the notion that money is a sign of success or achievement. Finally, Factor Motivator revealed the perception that money is a motivator.

Further Multivariate Analysis of Variance (MANOVA) showed that there were significant differences in these five factors among participants in different colleges of the university (Liberal Arts, Other, Education, Basic and Applied Sciences, Mass Communications, and Business), $F(25, 714) = 1.91$, Wilks’ Lambda = .787, $p = .005$. Univariate F Tests ($df = 5, 196$) showed that faculty in the College of Business had the highest concern regarding Equity and the highest endorsement of the attitude that money is a sign of their Success. It should be pointed out that in that study, faculty in the College of Business also had the highest income among different Colleges at the University.

This study investigates Factors Budget, Evil, Equity, Success, and Motivator as related to self-reported income and general life satisfaction in two countries: the USA.
and Spain. It is also expected that there will be cross cultural differences regarding attitudes toward money and other values.

**METHOD**

**Participants**

Data were collected from university faculty in two different countries. First, a short survey questionnaire was mailed to all full-time faculty members of a regional state university located in the Southeastern United States. Usable responses were collected from 207 faculty members. The response rate was 28.95 per cent. Second, the same survey questionnaire was translated into Spanish and distributed to all faculty members in Psychology and Economics at University of Valencia, Valencia, Spain by the second author. Usable surveys were collected from 102 professors resulting a response rate of 12.75 per cent. The demographic variables of these two samples are presented in Table 1.

**Measures**

Participants were asked to complete several demographic variables: sex (female = 0, male = 1), age, education, income, marital status (married = 1, single = 2, divorced = 3, widowed = 4), race, length of service at the current job (in years), total work experience (in years), and the number of job changes. Income was expressed in the US dollars. Further, we measured people’s money attitudes (Factors Budget, Evil, Equity, Success, and Motivator) based on Tang’s (1992; Tang & Whiteside, 1997) Money Ethic Scale. Participants indicated their general life satisfaction by answering the following two items: Satisfaction of my personal/family life. Satisfaction of my life as a whole these days. A total score was calculated by adding the scores of these two items. A 5-point scale was employed.
RESULTS

MANOVA Results

Table 1 shows the mean and standard deviation of demographic and attitudinal variables for faculty in the USA and in Spain. First, a multivariate analysis of variance (MANOVA) of participants' demographic variables using country as the independent variable showed that there were significant differences between professors in these two countries, $F(8, 236) = 19.16$, Wilks Lambda = .606, $p = .000$. Further univariate F tests ($df = 1, 243$) revealed significant differences for all variables except sex. Second, an additional MANOVA examining attitudinal differences suggested that the differences between faculty in these two countries were again significant, $F(6, 294) = 9.74$, Wilks' Lambda = .834, $p = .000$. Univariate $F$ test (1, 299) suggested that the differences were related to Factors Budget, Unethical/Evil, Equity, and Success. No significant differences related to Factor Motivator and general life satisfaction were found.

Multiple Regression Results

Self-Reported Income. Faculty's demographic and attitudinal variables were employed in two separate multiple regression analyses (one for the American sample and the other for the Spanish sample) to predict self-reported income (Table 2). Results of the American sample suggested that age, Factor Equity, sex (male), Factor Budget, and education were predictors of income, while the data of the Spanish sample showed that work experience, education, Factor Unethical/Evil (low score), and sex (male) were predictors of income.
Life Satisfaction. Table 3 shows that for the American sample, marital status (married), Factor Budget, Factor Success (low score), sex (male), education (low score) were predictors of general life satisfaction. For the Spanish sample, marital status (married) and age (young) were predictors of life satisfaction.

DISCUSSION

This study identifies specific demographic and attitudinal variables (Money Ethic endorsement) that are related to American and Spanish faculty members' self-reported income and life satisfaction. First, regarding professors' self-reported income, we found that in both samples, male faculty members with a higher level of education and longer work experience (older) tend to have higher income. High income American professors tend to have strong beliefs regarding Equity and that they Budget their money carefully. High income Spanish faculty tend to believe that money will not lead to unethical behavior and money is not Evil. Thus, those who made more money shared some demographic variables and some attitudinal variables. Money related attitudes do make a difference and are related to self-reported income. There are also some cross cultural differences between professors in the USA and Spain.

Second, we are also concerned about these professors' general life satisfaction which was measured by the two-item scale (satisfaction of my personal/family life and satisfaction of my life as a whole these days). In both samples, married professors report higher life satisfaction. It is reasonable to believe that married professors may enjoy a great deal of support, interaction, and trust among family members, i.e., satisfaction of their family life, than those who are not married (Gilbert & Tang, in press). Further, the
present findings may also reflect the fact that the term personal/family life was mentioned in the measure of life satisfaction.

For the Spanish sample, young professors are happier with their life than their older counterparts. For the American sample, life satisfaction tends to be related to the belief that professors budget their money carefully and money is not a sign of their success. Further, they tend to be male and tend to have lower level of education. These may reflect professors' psychological expectations and the discrepancy notion in that life satisfaction is a function of a comparison between what one receives (i.e., reality) and what one would like to receive (i.e., expectations) (Lawler, 1981).
REFERENCES


Table 1

Mean, Standard Deviation of Major Variables (the USA vs. Spain)

<table>
<thead>
<tr>
<th>Variable</th>
<th>The USA</th>
<th></th>
<th>Spain</th>
<th></th>
<th>Univariate F test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Demographic Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sex</td>
<td>.57</td>
<td>.48</td>
<td>.50</td>
<td>.50</td>
<td>.90</td>
</tr>
<tr>
<td>2. Age</td>
<td>46.82</td>
<td>9.76</td>
<td>34.15</td>
<td>9.12</td>
<td>88.92***</td>
</tr>
<tr>
<td>3. Education</td>
<td>21.03</td>
<td>1.72</td>
<td>19.81</td>
<td>2.23</td>
<td>21.45***</td>
</tr>
<tr>
<td>4. Marital Status</td>
<td>1.39</td>
<td>.72</td>
<td>1.76</td>
<td>.85</td>
<td>12.51***</td>
</tr>
<tr>
<td>5. Income</td>
<td>48,452.35</td>
<td>23,964.54</td>
<td>23,314.07</td>
<td>13,441.83</td>
<td>69.95***</td>
</tr>
<tr>
<td>6. Length of Service</td>
<td>11.18</td>
<td>9.95</td>
<td>7.71</td>
<td>7.72</td>
<td>7.00**</td>
</tr>
<tr>
<td>7. Work Experience</td>
<td>20.80</td>
<td>10.33</td>
<td>10.25</td>
<td>8.47</td>
<td>58.73***</td>
</tr>
<tr>
<td>8. No. of Job Changes</td>
<td>1.24</td>
<td>1.50</td>
<td>.82</td>
<td>1.46</td>
<td>4.13*</td>
</tr>
</tbody>
</table>

MANOVA: F (8, 236) = 19.16, Wilks Lambda = .606, p = .000
Univariate F test (1, 243)

Attitudinal Variable

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Budget</td>
<td>15.46</td>
<td>3.16</td>
<td>14.63</td>
<td>3.07</td>
<td>4.63*</td>
</tr>
<tr>
<td>2. Unethical/Evil</td>
<td>10.89</td>
<td>2.72</td>
<td>11.97</td>
<td>2.91</td>
<td>10.20**</td>
</tr>
<tr>
<td>3. Equity</td>
<td>11.01</td>
<td>2.34</td>
<td>9.18</td>
<td>2.39</td>
<td>40.49***</td>
</tr>
<tr>
<td>4. Success</td>
<td>5.81</td>
<td>2.09</td>
<td>5.16</td>
<td>2.12</td>
<td>6.38*</td>
</tr>
<tr>
<td>5. Motivator</td>
<td>7.09</td>
<td>1.73</td>
<td>7.17</td>
<td>1.56</td>
<td>.15</td>
</tr>
<tr>
<td>6. Life Satisfaction</td>
<td>8.51</td>
<td>1.44</td>
<td>8.14</td>
<td>1.85</td>
<td>3.57</td>
</tr>
</tbody>
</table>

MANOVA: F (6, 294) = 9.74, Wilks' Lambda = .834, p = .000.
Univariate F test (1, 299)

Note. *p < .05, **p < .01, ***p < .001
Table 2

Multiple Regression Analyses on Income (USA vs. Spain)

<table>
<thead>
<tr>
<th>Variable</th>
<th>USA</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(R^2) Change</td>
<td>Beta</td>
</tr>
<tr>
<td>1. Age</td>
<td>.22</td>
<td>.37</td>
</tr>
<tr>
<td>2. Equity</td>
<td>.06</td>
<td>.19</td>
</tr>
<tr>
<td>3. Sex</td>
<td>.03</td>
<td>.16</td>
</tr>
<tr>
<td>4. Budget</td>
<td>.02</td>
<td>.14</td>
</tr>
<tr>
<td>5. Education</td>
<td>.01</td>
<td>.12</td>
</tr>
</tbody>
</table>

Note. Sex: Female = 0, Male = 1.

Table 3

Multiple Regression Analyses on Life Satisfaction (USA vs. Spain)

<table>
<thead>
<tr>
<th>Variable</th>
<th>USA</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(R^2) Change</td>
<td>Beta</td>
</tr>
<tr>
<td>1. Marital Status</td>
<td>.10</td>
<td>-.30</td>
</tr>
<tr>
<td>2. MES-Budget</td>
<td>.04</td>
<td>.17</td>
</tr>
<tr>
<td>3. MES-Success</td>
<td>.02</td>
<td>-.17</td>
</tr>
<tr>
<td>4. Sex</td>
<td>.03</td>
<td>.21</td>
</tr>
<tr>
<td>5. Education</td>
<td>.02</td>
<td>-.15</td>
</tr>
</tbody>
</table>

Note. Sex: Female = 0, Male = 1. Marital Status: Married = 1, Single = 2, Divorced = 3, Widowed = 4.
APPENDIX

The New Money Ethic Scale

Factor Budget
1. I budget my money very well.
2. I use my money very carefully.
3. I pay my bills immediately to avoid interest or penalties.
4. I do financial planning for the future.

Factor Evil
5. Money undermines one's ethical norms and standards of conduct.
6. People perform unethical acts to maximize their monetary gains.
7. Money is evil.
8. Money (the love of money) is the root of all evil.

Factor Equity
9. People on the same job should be paid equally (equality).
10. People on the same job should be paid based on merit (equity).
11. Lower-level job with little responsibility should be paid less.

Factor Success
12. Money is a symbol of success.
13. Money represents one's achievement.

Factor Motivator
14. Money is a motivator.
15. I am motivated to work hard for money.

Note: Item 9 is reverse scored.
I. DOCUMENT IDENTIFICATION:

Title: Attitudes Toward Money and Demographic Variables as Related to Income and Life Satisfaction: USA vs. Spain

Author(s): Thomas Li-Ping Tang, Roberto Luna Arocas, & Harold D. Whiteside

Corporate Source: Middle Tennessee State University

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

Level 1 Release:

Check here

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

_____Sample_____

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 1

Level 2 Release:

Check here

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

_____Sample_____

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: Thomas Li-Ping Tang, Ph.D.

Organization/Address: Middle Tennessee State University

Murfreesboro, TN 37132

Printed Name/Position/Tite: Professor of Management

Telephone: (615) 898-2005

FAX: (615) 898-5308

E-Mail Address: ttang@mtsu.edu

Date: 11/26/97
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>Price:</td>
<td></td>
</tr>
</tbody>
</table>

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2d Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

6/96)