Comparing Teacher Education and Finance Majors' Agreement with Financial Morality Topics

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Paper Scheduled for Presentation at the Annual Meeting of the American Council of Consumer Interests, Orlando, FL. July 28, 2008

Abstract

The authors describe findings of a survey that contains items related to financial morality. They analyzed responses of 382 teacher education majors and finance majors at a Midwestern institution of higher learning. The study found highest agreement with items measuring business responsibilities, and lowest agreement with items related to wealth distribution. It notes significant differences and varying effect sizes among education and finance majors' interpretation of items concerning business responsibility, wealth distribution, and business management. Analysis of items concerning consumer attitudes and consumer behaviors found significant differences and moderate effect sizes. The authors argue for additional research that explores the concepts related to financial morality and provide suggestions for related study.

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Introduction

In May 2007, the Jump$tart Coalition expanded its standards for financial literacy from four (income, money management, savings and investment, and spending and credit) to six areas. These changes differentiated planning and risk management from money management. Despite these changes, the financial literacy community generally interprets financial literacy as relating to the acquisition, management, and development of financial resources.

Such interpretations of financial literacy provide a narrow focus, which discounts or ignores the social implications of financial decision-making. Recent literature (Lucey, 2004; 2007; 2008; Lucey & Cooter, 2008) argues that financial literacy contains socio-historical moral and spiritual connections that warrant scholarly exploration. Yet, appreciation of these conceptualizations may depend on those who interpret them. Lucey and Lorsbach (2007) relate curricular conceptualization to Morris' (1997) fulfillment dimensions and indicate that various education stakeholders have different motivations for teaching and learning.

If financial literacy contains a moral dimension, then one's social perspective may relate to his or interpretation of it. Among college students, this understanding may relate to the patterns of thinking espoused within their professional preparations. This paper describes the results of a research survey designed to interpret teacher education and finance majors' agreement with understandings of financial morality. In doing so, it provides a basis for scholarly dialogue about the nature of financial literacy and patterns of interpretation.

Literature

What is Financial Literacy?

The Jump$tart Coalition for Personal Financial Literacy was organized as a response to a social problem: Americans experienced high degrees of financial challenges despite earning large sums of money (Mandell, 2008). In 1997, the coalition administered its first survey of financial literacy of high school seniors. The survey was re-administered in 2000, and every two years afterward. On average, respondents failed to answer more than sixty percent of survey items correctly during any of the survey's administrations. The most recent survey yielded the lowest score of all (Jump$tart Coalition, 2008). Literacy was interpreted through four dimensions, income, money management, spending and credit, and savings and investment.

While there is no doubt that the results of these surveys document weaknesses in functional understandings of American youth, they also provide limited information about the depth of this problem. Lucey (2005) provided evidence that elements of social bias occur within the surveys. In other words, patterns of response occurred because survey items contained topics that some respondents had greater experience with than others did. Thus, the surveys may not measure the financial literacy of American youth, but may interpret how well respondents understand the financial concepts of those in higher socioeconomic classes.

There is evidence that different financial practices occur among various populations. Moschis' (1985) description of various household influences on consumer socialization, Varcoe et al.'s (2001) description of different financial priorities among teens of various social contexts and Varcoe, Martin, DeVitto, and Go's explanation (2005) of successes with environmentally relevant consumer education curricula provide theoretical and empirical support for such patterns of financial literacy. Other literature describing the different financial needs and practices by various age (DeVaney, 2008; Lyons, 2008; Mandell, 2008); gender (Hira & Loibl, 2008), and race or ethnicity (Bowen, 2008; Watchravesringkan, 2008; Yao, 2008) groups indicates that financial literacy represents an ongoing life skill that one must adapt to the socio-economic conditions that he or she inhabits.

Thus, if educators are to employ a standardized approach to financial literacy, it should be contextually relevant to all learners. Yet, literature indicates that environmental differences not only prompt different financial needs, they also foster patterns of social judgment. Hira and Mugenda's (1999) relating esteem to wealth ownership in adults and Tryzinski's (2002) findings of judgments among early adolescents based on type of financial payments indicates that financial differences represent the basis of social opinion.

The concept of classism involves the discrimination of people based on perceptions of their economic status and represents a social challenge (Koppelman, 2005) that education tends to ignore. Agnello and Lucey's (in press) disclosure of its conspicuous absence from social studies methods and social studies texts puts a twist on problem mentioned by Mandell (2008). In democratic society that values everyone's freedom, differences among economic classes remain unaddressed through public education.

Efforts to remedy classiist practices perpetuate the difficulty. Ruby Payne's (1995) popular framework for understanding poverty depends on unconfirmed observational evidence and continues stereotyping. Responses to an item on the 2006 Jump$tart Survey indicate that such attitudes persist among American high school seniors. The item instructed seniors to select "the greatest cause of financial difficulty, where families cannot pay their bills" (Mandell, 2007, p. 145), less than ten percent (8.60%) of respondents attributed such conditions to bad luck.

Educators generally recognize that poor school achievement relates with low economic status. While this relationship relates to a myriad of factors, such as family structure, employment stability, environmental hazards, and nutritional patterns, we think that the role of fate, prompted by a lack of control over one's birth contexts, represents an underappreciated component of financial development. Lucey and Cooter (2008) claim that financial literacy represents a broadly defined concept that requires understanding of various academic disciplines, such as biology, psychology, sociology, and philosophy. While academics may appreciate the conceptual relevancy of this interpretation, the moral application of this understanding requires exploration.

What is Morality?

Philosophers and researchers have considered and debated the concept of morality for some time. While a comprehensive presentation of moral and ethical history is beyond the scope of this paper, we point out that previous works have found various interpretations of moral thought. For example, MacIntyre (1988) traced the history of moral thought and discovered three conflicting moral patterns. Wren's (2008) recounting the ideas of Budda, Plato, Aristotle, and Kant affirms that different interpretations of morality that occur, justifying the various patterns of current research. In a post-modern society that emphasizes increasingly impulsive decision-making, Nucci's (2001, 2008) distinguishing morality from social convention and aspirations to "develop young people capable of handling moral complexity, ambiguity, and contradiction." (2008, p. 305) relate to the challenges of both differentiating these two concepts and preparing children to recognize these differences.

What is the nature of morality? In conceptualizing moral theory as a debate along three spectra Nucci and Narvaez's (2008) suggest that moral conceptualization represents a complex interpretative concept. Lucey, Giannangelo, Hawkins, Heath, and Grant (2007) define morality as "a pattern of thought (or policy) and action whereby one adds to or subtracts from another's material or psychological well-being" (unpaginated). This definition appears to be supported by Smetana (2006) who notes that children perceive similar situations differently and Bacigalupa (2007, 2008) who describes how kindergarteners interpret the moralities of books differently. Bergman's (2002) vision of child development as a period for shaping one's moral identity would indicate that morality represents an ongoing negotiation of reconciling personal needs and wants within one's various social environments.

What might cause this confusion between morality and social convention? Lucey's (2003b) comparison of Egyptian society, Greek philosophies, and preaching of Jesus of Nazareth concluded that economic contexts related to interpretation of moral ideals, yet also found educational institutions to be structured on economic bases - a situation that persists (Bobbitt, 2002; Lucey, 2003a). Thus, it may be argued that education represents a process to preserve the social ideals of the economically fortuned. This process conditions children to label socially accepted ideals as "moral". Yet research indicates that religious understandings, which commonly undergird moral thinking, change with economic conditions. Lucey, Kruger, & Hawkins' (2008) survey of literature concerning pre-colonial Africa found that economic change prompted new religious interpretations. Subsistence societies saw religion as a source for necessities; newly prosperous societies saw it as a vehicle for structure. Phillips' (2006) association of U. S. government policy with religious fundamentalism and Lucey's (2008) relating current economic excesses to religious perversity would indicate that post-modern U.S. society experiences a precarious situation the uses religion for moral justification, rather than as a device for social reflection.

What is Financial Morality?

What does it mean to be financially moral? The obvious response would appear claim that one should meet one's financial obligations, such as paying one's bills in a timely manner. Yet one may construe such obligations as social convention. For example, one's obligation to pay a utility for the power to run an air condition may be construed as social convention because it occurs in materially developed countries, but not in others. If we were to accept Lucey et al's (2007) definition then financial morality may represent an interpretation of financial decision-making as it relates to others' welfares. For example, the decision to donate money to someone who is poor represents a moral decision because one is sacrificing one's financial resources to give one the chance of improving his or her own financial welfare. Yet, the decision represents a contextual one. If morality is a quantifiable concept, a person who has a financial net worth of $100 and donates $50 to the aforementioned poor person may be construed as being more moral than a person having a financial net worth of one million dollars and donates the same amount.

Financial morality is not limited to individuals, but also relates to businesses and institutions. If one considers businesses as social constructs that experience life cycles of birth, maturity, and decline, then he or she should also recognize that they also have obligations to society beyond the goods and services that they provide for profit. Yet, Minnameier (2004) observes that that the bases for moral decisions differ among institutions and individuals.

> …individual morality is deemed unfit to solve the problems of modern mass societies. Institutional ethics employ and coordinate the combined efforts and moral claims of millions, if not billions, of people. Whereas each individual's personal horizon is limited, social institutions reflect everything that has contributed to them, and hence to their ethical functioning, in the process of their formation. (p. 362)

The reconciliation of these ethical challenges may represent one of knowledge about these processes. Those who are trained in business recognize the philosophical bases for entrepreneurial decision-making and profit maximization. Those trained to educate individuals possess awareness of the various psychological factors that relate to patterns of knowledge retention. One's patterns of value judgments relate to how he or she has been professionally prepared.

How does one measure financial morality? Lucey (2004) interpreted financial morality using seven items and found that educators of grades K-4 agreed with these items to a similar degree as generally accepted financial education tenets, thus this topic would appear to be of educational interest. However, seven items provide a limited interpretation of this important concept. Our paper provides an expanded interpretation of financial morality, comparing interpretations among education and finance majors. It is guided by the following research questions.

- Do teacher education majors agree with tenets of financial morality?
- Do finance majors agree with tenets of financial morality?
- Are there significant differences in whether education and finance majors' agree with financial morality?

Methodology

Sample

Data derived from volunteers responding to an invitation to complete the Financial Morality Topics Measure (FMTM). Students were invited to complete the online survey during the fall, 2007 semester by three emails over a period of two months. The sample consisted of freshman, sophomore, junior and senior teacher education majors (N = 5,856) and freshman, sophomore, junior and senior finance majors in the college of business (N = 562) at a Midwestern institution of higher learning. The procedure yielded approximately 485 responses, of which 382 completed all survey items, prompting a net response rate of 5.95%. The response rate among education students was 5.49% and the response rate among finance majors was 9.07%.

Of respondents completing all items, there were 113 males and 269 females; 350 white students and 32 of other or mixed races. Nearly one-half or 49.74%, of respondents came from suburban settings. In terms of respondents' educational statuses, more than three-quarters 84.29% were education majors, with 13.35% being business majors and 2.36% being "other". More than two-fifths (40.84%) of respondents were seniors, with juniors comprising 26.96% of respondents, sophomores representing 17.54%, and freshmen being 14.66%. Approximately 84% of respondents were traditionally aged college students (between the ages of 18-23 years). Table 1 organizes respondent traits by areas of study.

Instrument

The researchers employed the Financial Morality Topics Measure, an online survey to collect data concerning respondents' interpretation of items. The researchers posted the electronic survey with the assistance of the University's Center for Teaching Learning and Technology prior to submission to IRB for approval. The survey expands areas of financial morality indicated items from Lucey (2004). Lucey reported a moderate inter-item correlation ($\alpha = .68$) for the seven items. While he interpreted the alpha as acceptable from the untested nature of financial morality, the items represented different facets of financial morality that may appeal to different respondents.

Table 1

Frequencies organized by area of study (*n* = 382)

		Education	Finance	Other
Gender				
	Male	79 (24.59%)	31 (60.80%)	3 (33.30%)
	Female	243 (75.50%)	20 (39.20%)	6 (66.70%)
Racial Identity				
	White	299 (92.90%)	42 (82.40%)	9 (100.00%)
	Black/Non-Hispanic	8 (2.50%)	2 (3.90%)	0 (0.00%)
	Hispanic	4 (1.25%)	1 (2.00%)	0 (0.00%)
	Multiracial or Other	11 (3.40%)	6 (11.80%)	0 (0.00%)
Year of Study				
	Freshman	51 (15.80%)	3 (5.90%)	2 (22.20%)
	Sophomore	54 (16.80%)	11 (21.60%)	2 (22.20%)
	Junior	85 (26.40%)	16 (31.40%)	2 (22.20%)
	Senior	132 (41.00%)	21 (41.20%)	3 (33.30%)
Traditionally Aged Students				
	Yes	266 (82.60%)	47 (92.20%)	8 (88.90%)
	No	56 (17.40%)	4 (7.80%)	1 (11.10%)
Hometown Community				
	Inner City/Urban	14 (4.30%)	1 (2.00%)	0 (0.00%)
	Suburban	162 (50.30%)	21 (41.20%)	7 (77.80%)
	Small Town/Community	64 (19.90%)	15 (29.40%)	2 (22.20%)
	Mid-sized City	53 (16.50%)	9 (17.60%)	0 (0.00%)
	Rural	29 (9.00%)	5 (9.80%)	0 (0.00%)

Parent Education				
	Did not complete High School	4 1.20%	0 (0.00%)	0 (0.00%)
	High School Diploma	56 (17.40%)	3 (5.90%)	3 (33.30%)
	Some College	84 (26.10%)	20 (39.20%)	2 (22.20%)
	College Graduate	105 (32.60%)	18 (35.30%)	2 (22.20%)
	Post Graduate	73 (22.70%)	10 (19.60%)	2 (22.20%)

Prospective items were submitted to three persons, an elementary social studies teacher educator at a Southern suburban institution, an economics researcher at a Southern urban institution, and an economics educator at a Midwestern urban institution. Two respondents provided comments concerning phrasing and structure of items. One respondent observed that the instrument appeared to have elements of bias. The respondent commented that "teachers, people well known for their economic and financial ignorance" (reviewer, personal correspondence, January 19, 2007) would probably express concerns about topics favoring economic markers, adding that "few teachers understand what the role of profit is in a market economy and how the public sector depends specifically on a healthy and profitable private sector" (reviewer, personal correspondence, January 19, 2007)

The survey contained 35 items within seven subscales (consumer attitudes, consumer behaviors, business responsibility, economic equity, wealth distribution, identity issues, and business management). The employment of 35 items distributed among seven subscales allowed for analyzing the plausibility of these interpretations. Two or three items associated with each subscale were negatively phrased. The researchers sequenced items so that each subscale was represented in every seventh item (a, b, c, d, e, f, g, a, b, c, d, e, f, g) to prevent respondents' awareness of subscales. The researchers formatted items in a forced choice response structure, using a 4-point Likert-style ranging from Strongly Agree (1) to Strongly Disagree (4).

Table 2
Inter-item Consistency, Financial Morality Topics Measure (All subscales contain five items) (*n* = 325)

	$\alpha_{Education}$ (*n* = 240)	$\alpha_{Fiancne}$ (*n* = 42)	α_{Total}	Highest α Removing one item
Consumer Behaviors	.05	.00	0.05	0.17
Consumer Attitudes	.23	.12	0.24	0.43
Business Responsibilities	.18	.49	0.23	0.66
Economic Equality	.56	.74	0.59	0.73
Wealth Distribution	.80	.89	0.82	0.81
Identity Issues	.53	.21	0.52	0.55
Business Management	.24	.62	0.37	0.56

Table 2 presents the alphas associated with the subscales. The low degrees of consistency associated with education majors may result from various degrees of exposure to these topics. Education respondents included elementary, middle, and secondary education majors. Teacher education preparations tend not to include coursework related to economics or personal finance, except for secondary teachers who are preparing to teach social studies.

The consistency of finance respondents' interpretations of items within the economic equality and wealth distribution subscales may relate to curricula that consistently present ideals of self-determination through financial awareness. Conversely, the lower consistency associated with the identity issues subscale may result, in part, from a lack of coverage in their college coursework.

According to Thorndike (2005), researchers should compare instrumentation with other measures that interpret similar phenomena. The Defining Issues Test (DIT2), (http://www.centerforthestudyofethicaldevelopment.net/) represents a tool that uses several scenarios to interpret ethical business behavior; however, its construct and application, which measure respondents' interpretation of various scenarios, do not lend themselves to comparison with this survey.

While Lucey (2004) reported an alpha of 0.68 for his seven items, his study explored the concept of financial morality in a general vein and interpreted the ideas of K-4 educators. Our study provides more depth to this conceptualization by providing more items to explore the areas touched on by Lucey's effort.

Although our study interprets perceptions of financial morality, we recognize that views of these concepts may relate to respondents' sociological contexts. The present study interprets data drawn from a sample that is heterogeneous in terms of professional intention. While finance majors have consistent professional direction, teacher education majors have various motives for entering the profession ranging from interests in children to interests in subjects. Because of the large percentage of the sample that is comprised of various education majors, we considered alphas of greater than .50 as acceptable to accommodate such interpretational variances. The presented findings, exclude discussions about the Consumer Attitudes and Consumer Behaviors subscales, construing their inter-item correlations as significantly less than accomplished by chance. We present respondents' agreement with five subscales: business responsibilities, economic equality, wealth distribution, identity issues, and business management. We also describe patterns of response to Consumer Attitudes and Consumer Behavior items in an effort to clarify the nature of these concepts.

Results

We organize our findings from general to specific, beginning with disclosure of patterns of agreement towards the five financial morality subscales and then considering patterns of response to items in subscales having the highest and lowest amounts of agreement. We also compare patterns of agreement between teacher education and finance respondents before reviewing patterns of agreement with items comprising the consumer attitudes and consumer behavior subscales.

Patterns of Agreement with Financial Morality Areas

Table 3 depicts the descriptive statistics that convey respondents' agreement with the various subscales. In these tables, lower means represent higher respondent agreement. The statistics indicate that respondents agree the most with items related to expectations for business conduct and least with items concerning distribution of resources. These patterns indicate that the respondents consider conscientious conduct to be virtuous for institutional citizens.

Table 3
Descriptive Statistics (1 = Strongly Agree, 4 = Strongly Disagree)
Agreement with Financial Morality Areas (*n* = 320)

	μ	Min.	Max.	Skew	Kurtosis
Business Responsibilities (4 Items)	1.79	1.00	3.25	.53	.73
Economic Equality (4 items)	1.92	1.00	3.75	.75	.53
Wealth Distribution (5 items)	2.30	1.00	4.00	.18	.11
Identity Issues (4 items)	1.87	1.00	3.50	.38	.26
Business Management (4 items)	1.84	1.00	3.00	.30	-.34

In Tables 4, 5, and 6, respectively, we compare education and finance majors' agreement with these areas, and present their responses to the areas prompting the most and least levels of agreement.

We present descriptive statistics comparing teacher education and finance respondents' agreement with the various subscales in Table 4. The table indicates that respondents of both colleges agree the most with items associated with expectations for business conduct and least with items associated with topics in distribution of resources.

We conducted t-tests to interpret differences between education and finance majors' agreement levels and found significant differences for all topics. The effect sizes vary with the subscale. The effect size associated with identity issues indicates that, regardless of the size of the sample, large differences occur between education and finance majors' interpretations of these items. The differences associated with wealth distribution and business management topics are also large, but not to the extent as they are with identity issues. Moderate differences are associated with interpretations of business responsibilities and economic equality topics.

Table 4

Descriptive Statistics
Comparisons of Respondents in Teacher Education and Finance
(1 = Strongly Agree, 4 = Strongly Disagree)(n = 311)

	Education	Finance	B-E	*p*	*d*
Business Responsibilities (4 Items)	1.77	1.92	0.15	.03*	.33
Economic Equality (4 items)	1.88	2.13	0.25	.03*†	.40
Wealth Distribution (5 items)	2.25	2.64	0.39	.00**	.66
Identity Issues (4 items)	1.82	2.17	0.35	.00*††	.95
Business Management (4 items)	1.81	2.10	0.29	.00**	.66

* $p < .05$, ** $p < .01$
† Levene's test was significant. Calculation based on 50.58 df.
† † Levene's test was significant. Calculation based on 70.37 df.

Respondents agreed the most with items interpreting business responsibilities. We disclose statistics associated with responses to these items in Table 5, and observe that the highest disagreement concerns extraordinary business community involvement. Significant differences between teacher education and finance majors' agreement with these items indicate that students in both colleges recognize the importance of businesses' community responsibilities; however, finance majors agree with them much less. The effect size of these differences are moderate.

Table 5

Agreement with Business Responsibilities Items, Compared by Major
(1 = Strongly Agree, 4 = Strongly Disagree) (n = 311)

	Education	Finance	B-E	*p*	*d*
Item 3: Businesses should maintain safe communities	1.50	1.42	(0.08)	.42	n. a.
Item 10: Businesses should contribute financially to the community they are based in.	1.66	1.84	0.18	.09	n. a.
Item 17: Businesses should not volunteer their employee' time and efforts to maintain safe communities. (N)	2.05	2.33	0.28	.02*	.37
Item 24: Businesses have no obligation to contribute to the community besides providing their products, services (N)	1.88	2.12	0.24	.03*	.32

* $p < .05$

Respondents agreed the least with items within the wealth distribution subscale. We disclose statistics associated with responses to these items in Table 6. Significant differences between teacher education and finance majors' agreement with all items indicate that business majors may interpret these obligations within profit motive conceptualization. Businesses have obligations to communities; however, these obligations are limited to the extent that they do not impair business' profitability.

Table 6

Agreement with Wealth Distribution Items, Compared by Major
(1 = Strongly Agree, 4 = Strongly Disagree) (n = 311)

	Education	Finance	B-E	p	d
Item 5: Rich people should not financially assist poor people with housing (N)	1.96	2.33	0.37	.00**	.51
Item 12: Rich people should financially assist the poor with food.	2.09	2.42	0.32	.02†*	.43
Item 19: Rich people should financially assist poor people with health care	2.28	2.77	0.14	.00**	.62
Item 26: Rich people should not financially assist poor people with education. (N)	1.93	2.23	0.30	.00**	.49
Item 33: Rich people should financially assist the poor with technology items such as televisions, computers, and videogame systems.	3.00	3.37	0.37	.02*	.51

* $p < .05$; ** $p < .01$
† Levene's test was significant. Calculation based on 52.02 df.

Education and business students have significantly different agreement levels with all items. The effect sizes of these differences are all moderate. These differences may result from a sense of merit and entitlement. Business tends to conceptualize goods and sources as commodities that are earned. The philosophy of public education involves an interpretation as an opportunity right to all children.

Consumer Subscales

Because items within the two consumer behaviors and consumer attitudes, subscales prompted low inter-item correlations, we examine patterns of responses to items within these subscales for patterned differences. Because of the small number of items comprising these subscales, we decided that a comparison of means would be sufficient to interpret these items. Table 7 presents the descriptive statistics associated with consumer behavior items.

Table 7

Descriptive Statistics
Consumer Behaviors Items
(*n* = 320) (1 = Strongly Agree, 4 = Strongly Disagree)

	µ	Min.	Max.	Skew	Kurtosis
Item 1: People should not be courteous to others when buying things (N)	1.73	1.00	4.00	1.24	.05
Item 8: Buying things for themselves makes people happy.	2.04	1.00	4.00	.44	.53
Item 15: People should buy lots of things because they have earned them. (N)	1.92	1.00	4.00	.52	1.28
Item 22: People do not like to buy things for others. (N)	1.85	1.00	3.50	.38	-.10
Item 29: When buying things, people should think about others who are less fortunate.	2.23	1.00	4.00	-.04	-.51

The low means associated with items 1 and 22 indicate that respondents agreed with items concerning acquisitions for others and social behaviors that help others. In other words, it was acceptable or polite to purchase things for others, and to be polite while doing so. The higher means related to items 8 and 29 indicate that although respondents agree that it is okay to buy things for themselves, the less fortunate should not be a consideration.

In Table 8, we present statistics comparing the responses of teacher education and finance majors to the consumer behavior items. The only item involving significant differences between education and business respondents concerned thoughts about the less fortunate. The size of the effect was moderately small.

Table 8

Agreement with Consumer Behaviors Items, Compared by Major
(1 = Strongly Agree, 4 = Strongly Disagree) (n = 311)

	Education	Finance	B-E	*p*	*d*
Item 1: People should be not courteous to others when buying things (N)	1.70	1.88	0.18	.30	n. a.
Item 8: Buying things for themselves makes people happy.	2.07	1.93	0.14	.21	n. a.
Item 15: People should buy lots of things because they have earned them. (N)	1.91	2.05	0.14	.19	n. a.
Item 22: People do not like to buy things for others. (N)	1.88	1.70	(0.18)	.11	n. a.
Item 29: When buying things, people should think about others who are less fortunate.	2.21	2.47	0.36	.03*	.37

* $p < .05$

Table 9 presents the descriptive statistics associated with consumer attitudes items. There was most agreement with Item 9, which indicates that if people have the financial resources, they have the right to acquire things. The low agreement with Item 16 indicates that limitations to this idea exist. There is a sense of entitlement, even if one does not possess these resources.

Table 9
Descriptive Statistics
Consumer Attitudes Items
(*n* = 320) (1 = Strongly Agree, 4 = Strongly Disagree)

	μ	Min.	Max.	Skew	Kurtosis
Item 2: Developing and following a spending plan should be more important than acquiring things	1.77	1.00	4.00	.54	.71
Item 9: People have a right to the things that they buy.	1.74	1.00	4.00	.35	.36
Item 16: The opportunity to purchase goods and services is a privilege for those who can afford them. (N)	2.73	1.00	4.00	-.34	.05
Item 23: People do not have to consider the nature of the conditions that produced the manufactured products purchased. (N)	1.86	1.00	4.00	.49	.39
Item 30: People do not have to consider the effects of their purchases on the global environment. (N)	1.86	1.00	4.00	.68	.76

In Table 10, we present statistics resulting from t-test comparisons of teacher education and finance majors' responses of to the consumer behavior items. Significant differences were found between education and finance respondents' interpretations of purchases as rights and privileges and their environmental concerns. The effect size associated with the difference in perceptions of purchasing as a privilege was large. A moderate effect size was related to environmental concerns.

Table 10

Agreement with Consumer Attitude items, Compared by Major
(1 = Strongly Agree, 4 = Strongly Disagree) (n = 311)

	Education	Finance	B-E	p	d
Item 2: Developing and following a spending plan should be more important than acquiring things	1.77	1.77	0.00	.99	n. a.
Item 9: People have a right to the things that they buy.	1.78	1.58	0.20	.07†	n. a.
Item 16: The opportunity to purchase goods and services is a privilege for those who can afford them. (N)	2.65	3.23	0.58	.00††	.92
Item 23: People do not have to consider the nature of the conditions that produced the manufactured products purchased. (N)	1.84	2.00	0.16	.16	n. a.
Item 30: People do not have to consider the effects of their purchases on the global environment. (N)	1.81	2.19	0.38	.00**	.52

* $p < .05$, ** $p < .01$
† Levene's test was significant. Calculation based on 61.78 df.
† †Levene's test was significant. Calculation based on 70.05 df.

Discussion

This study documents that education and finance students tend to agree with general concepts in financial morality; however, education students agree significantly more with items that provide specific patterns of expectation. While these findings may extend to education and finance majors at this institution, the reader should exercise caution before extending results of this survey to the general population of education and finance majors.

Nevertheless, the differences between education and finance students merit consideration. Because finance represents an academic discipline that depends on management, growth, and protection of resources, finance majors may express an interest in these topics and departments of finance reinforce these attitudes. Teacher education majors arguably have interest in children and or curricula, humanitarian topics that involve degrees of flexibility and interpretation. While Bergman's (2002) ideas about moral negotiations may support developmental difference patterns, Bronfenbrenner's (1979) ecological systems theory reminds us that biological/psychological conditions relate to such patterns. Additional research needs to (a) confirm these differences and (b) explore the conditions that cause them to occur.

Responses to consumer attitude items indicate perceptions of consumer purchases as rights more than a privilege. Considering the capitalist society in which these respondents develop, such findings are expected. Farnsworth and Davis's (2008) connection of culture to personal financial management identity supports previous theory and research (Moschis, 1985; Varcoe et al., 2001) relating financial behaviors with socio-economic and domestic contexts. Mandell's (2007) report of how few high school seniors attributed financial problems fate illustrates an ominous sense of control among American youth when financial status involves a significant degree of life placement. Further research needs to employ surveys of heterogeneous samples, focus groups and case studies to examine the conditions that prompt these values.

The comparisons among teacher education and finance majors would suggest that finance majors have more narrow financial literacy interpretations, while teacher education majors are more open. While this finding may be intuitive, we point out that comparisons were made with teacher education majors in general. Additional work is needed to interpret attitudes towards financial morality between teacher education majors who have various professional interests. Particularly for aspiring elementary education teachers, difficulties facilitating students' understandings of such concepts occur in a standardized environment that emphasizes reading and mathematics. Although Lesser (2007) writes that mathematics represents a basis for initiating conversations about financial morality topics, educators are cautioned about the inconsistencies between financial mathematics curricula and patterns of development in mathematical understandings (Brenner, 1998).

Conclusions

Our findings indicate that respondents tend to agree with the presented tenets of financial morality and that significant differences in the extent of agreement in several areas occur between teacher education and finance majors. Through this study, we intended to stimulate a professional dialogue about the nature of financial morality and patterns of its interpretation. In future works, we expect to use this data to conduct inferential analysis concerning influences on interpretations of financial morality. Our survey also asked respondents to tell us what financial morality meant to them, and we will interpret those responses as well. In encouraging this academic conversation, we invite scholars to pursue multidisciplinary investigations that consider these topics through various lenses. Particularly, we recommend the following research pursuits.

- Clarify the tenets of morality associated with consumer attitudes and consumer behaviors.

The low inter-item correlations associated with these subscales indicate that respondents agreed with comprising items to different degrees. Our interpretation of descriptive statistics associated with these items provided some understanding of response patterns; however, factor analysis would provide a more substantial interpretation. Even with this large sample, the factoring of five items within each subscale may lead to much conjecture about the substance of these areas. Future efforts could use observational research, consumer surveys, and consumer focus groups as data for defining these areas.

- Reinterpret interpretations of financial morality using broader samples from institutions in a variety of settings.

Although it was robust, this study drew respondents from one public higher education institution. Recognizing that institutions consist of student bodies that possess different values and dispositions, researchers should survey students in a variety of institutions to confirm or refute the results presented herein.

- Conduct focus groups to explore the conditions for defining ideas related to these items.

This paper presented results of an online survey that offered little opportunity for individualized responses to the presented topics. Capturing the ideas of students through focus groups would provide data about how respondents conceptualize the topics and explore patterns of their morality.

- Clarify how particular education and business disciplines relate to these patterns of interpretation.

This study only allowed students to indicate if they were teacher education or finance majors. Interpreting patterns by academic concentration (e.g., elementary middle or secondary education and banking, insurance or investments) might provide additional insight into how particular academic choices relate to response patterns.

- Interpret how differences among education disciplines may apply curriculum and instruction.

Because of the significant difference in the responses of teacher education and finance majors, research needs to clarify how educators and students of various content areas respond to these items. For example, how might mathematics educators and social studies educators' interpretations differ? How might multiculturalists and economists' interpretations differ? Lucey (2004) found no significant various influencing patterns of financial morality interpretations; however, he sampled educators associated with grades K-4: those who more focused on child welfare than content understandings. If understandings of the content relate to professional preparations and objectives, patterns of agreement with financial morality may relate to patterns of content specialization.

- Interview children of different socioeconomic contexts to understand patterns of knowledge of financial morality

Bacigalupa's (2007, 2008) work indicates the contextual relevancy of children's interpretations of moral literature. If context relates to patterns of moral development and interpretation, then understandings of financial morality may involve similar relationships. Research studies might duplicate Bacigalupa's (2007, 2008) methods of discussing moral stories to interpret children's understandings of financial morality. Research efforts might employ games or simulations to interpret patterns of children's decision-making about these issues.

This study provides us a snapshot of students' understanding of the tenets of financial morality. Investigations in the areas recommended above would provide further evidence to confirm or refute our findings and clarify understandings regarding the nature of financial morality and patterns of its interpretations. With further clarification of students' interpretations, understandings of their origins, and the influence of their contexts, we can better depict the nature financial morality and inform discussions applying this knowledge in working with students.

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