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### ON THE CENTRALITY OF SOCIAL NORMS IN DETERMINING MBA PROGRAM SUCCESS

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#### Abstract

Maintaining student satisfaction and through it retaining students and having them recommend the program to others, is central to the success of any MBA program. This is especially important in distance learning programs because of their high dropout rates. The study shows the centrality of social norms outside the realm of the MBA program in determining three aspects of such satisfaction, namely satisfaction with knowledge gained in the program, MBA personnel, and quality of the MBA program e-learning services. Data collected from students who participated in a blended distance learning MBA program show the importance of social norms over and above the communicational and technical characteristics of the e-learning services. Social norms also contributed to student self-reported ability to cope with the learning load which significantly influenced both elements of retention: willingness to recommend the program and reduced inclination to withdraw. The importance of social norm management is discussed.

Key words: Student retention, social norms, e-learning, blended learning, MBA student retention.

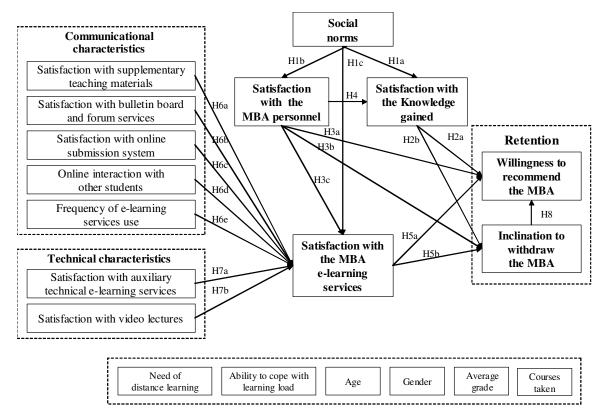
#### Introduction

As MBA programs proliferate (Pfeffer and Fang 2002), enhanced to some extent by the rapid growth of e-learning that replaces both distance learning and traditional face-to-face instruction (Alavi and Leidner 2001; Hiltz and Turroff 2005), the age old questions of how to retain students and how to create a reputation network increase in importance. The online nature of the process adds more importance to these questions, considering the phenomenal growth the online environment has created by enabling access to higher education for new student clienteles (Guri-Rosenblit 2005). These questions are becoming especially pertinent considering the shift online courses have created from in class to online instruction and the marked change in the social structure and interaction this has resulted in. Coupled with this change are the raised concerns about the lower quality of the e-learning process (Hirschheim 2005), manifested by increased percentages of student dropout (Rovai 2002, 2003; Tresman 2002).

Answering these questions is not aided much by previous research. Most student persistence research focused mainly on undergraduate students (Tinto 1975, 1998; Tresman 2002; Simpson 2003). Studies that dealt with MBA dropout (e.g. Kanuka

and Jugdev (2006) and Levy (2007)) or with graduate students retention in general (e.g., Girves & Wemmerus 1988) are rare. Graduate students have already proven their ability to cope with academic studies whereas some undergraduates may lack the required skills. On the other hand, graduates, especially MBA students, may have less available time to study compared to undergraduates, and this may increase their inclination to withdraw. Therefore, the issue of graduate student retention requires further study. Moreover, the little that has been done on online education concentrated on student characteristics as the main factors which explain persistence (Barefoot 2004; Woodley 2004). These characteristics, while arguably important, do not capture the main difference between online and in class instruction. Online studies offer students more flexibility in time, pace and place of learning, which is supposed to help students to better deal with their study load, but it is this lack of framework combined with reduced social interaction with tutors and colleagues that may eventually lead to their withdrawal. Hence high dropout rate is one of the major problems of online studies.

This paper is intended to share the experiences of researchers on the use of information technologies in education in Universities. The objective of this research, in contrast to the above cited previous research, is to take a more business oriented approach to these questions. We regard the students as clients who consume MBA services (Armstrong 2003). As such, there should be two key categories influencing student retention and their recommendation of the program: experience based beliefs about the quality of the MBA program and social norms based on the opinions of important others. This dichotomy is based on TPB, the Theory of Planned Behavior (Ajzen and Fishbein 1980; Ajzen 1985). If students are satisfied with the quality of the program they are taking, then presumably these students will be more inclined to continue their studies and be more willing to recommend the program to others. This quality to retention and recommendation relationship has been extensively studied in many other settings (Parasuraman et al. 1985; Parasuraman et al. 1994; Zeithaml et al. 1996). In contrast to quality beliefs which relate to the actual MBA program, social norms, the main objective of this study, deal with norms the students acquired about the MBA based on the opinions people who are important to them have. In other words, while beliefs deal with personal experience which to some extent is controllable by the school, social norms are norms acquired from outside the learning experience and beyond the control of the school. Although the importance of social norms in student retention was recognized by Biddle et al. (1987), it did not receive much attention afterwards. Nonetheless, social norms have been shown to be critical in many other contexts of information technology adoption (Karahanna and Straub 1999). In this study, the importance of social norms is shown empirically. The proposed research model is shown in Figure 1.



CONTROL VARIABLES

Figure 1. The Proposed Research Model

#### **Research Model and Hypotheses**

According to TPB (Ajzen and Fishbein 1980; Ajzen 1985) behavioral intentions are the results of behavior specific beliefs and of social norms based on the influence of others who are personally important to the decision maker. But there is good reason to believe that social norms might also directly affect student satisfaction. Generally, people are strongly influenced in their assessments by what they think are the norms and beliefs of others they identify with, such as peers and friends (Berscheid 1966; Hogg and Terry 2000). Indirect empirical support for this can be found in Biddle et al. (1987) who showed that social norms had strong effect on undergraduate students' retention decisions at a major university, and in Bank et al. (1990) who found that parents and peers had a strong positive influence on student persistence. Social norms create the context through which people decide on behavior especially when there is little other actual experience (Karahanna et al. 1999). We therefore expect a significant relationship between social norms and the various measures of MBA related satisfaction, because at least in part the assessment of situations depends on the influence of important others.

H1a: Positive social norms toward MBA studies enhance student satisfaction with the knowledge gained in the MBA program.

H1b: Positive social norms toward MBA studies increase student Satisfaction with the MBA personnel.

H1c: Positive social norms toward MBA studies augment student satisfaction with the MBA e-learning services.

Nonetheless, as Karahanna et al. (1999) have shown, and as TPB predicts, actual experience is more influential than social norms. In other words, experience gained in the MBA program should be the more important in influencing retention.<sup>1</sup> This expected effect on satisfaction is hypothesized, as in service quality research in general (Parasuraman et al. 1985; Zeithaml et al. 1996), to determine retention and recommendation.

H2a: Satisfaction with the knowledge gained in the MBA program enhances student willingness to recommend the MBA program to others.

H2b: Satisfaction with the knowledge gained in the MBA program reduces student inclination to withdraw the MBA program.

The importance of perceived human touch is central to the e-learning experience (Salmon 2004). Extending this idea to online courses, students who are content with the program team should be more satisfied with the e-learning services, less inclined to leave, and more inclined to recommend the program.

H3a: Satisfaction with the MBA personnel enhances student willingness to recommend the MBA program to others. H3b: Satisfaction with the MBA personnel reduces student inclination to withdraw the MBA program.

H3c: Satisfaction with the MBA personnel positively influences student satisfaction with the MBA e-learning services.

Since the program team is a facilitator of imparting students with knowledge, positive interaction experiences with the MBA personnel are expected to increase satisfaction with the knowledge gained.

H4: Satisfaction with the MBA personnel positively affects student satisfaction with the knowledge gained in the MBA program.

E-learning services are considered a major part of the distance learning environment and enable better services to the students. Therefore, students who are pleased with these services are expected to recommend the program and continue their studies much more.

H5a: Satisfaction with the MBA e-learning services enhances student willingness to recommend the MBA program.

H5b: Satisfaction with the MBA e-learning services reduces student inclination to withdraw the MBA program.

In addition to social norms, H1c, and student satisfaction with the program personnel, H3c, satisfaction with the MBA elearning services is also proposed to be positively influenced by the communicational and technical characteristics of the provided e-learning services themselves. These characteristics constitute the MBA e-learning services and hence an appropriate level of service by each should also be crucial in creating satisfaction with the e-learning services as a whole. Communicational characteristics refer to course websites as enablers of improved communication between students and the course team, as well as among students. These are divided in the online teaching environment into five distinct types of online tools or activities. These are described next.

<sup>&</sup>lt;sup>1</sup> Although according to Pfeffer and Fang (2002) studies conducted by business organizations show that MBA graduates did not perform better than their non-MBA colleagues, it should be noted that these non-MBAs probably had some business related higher education (e.g. a Certified Public Accountant).

Supplementary teaching materials include summaries, presentations, task solutions and sample exams, which the course coordinator uploads to the website and students may download. These are extra materials, which are provided to the students in addition to the obligatory course printed material.

H6a: Satisfaction with supplementary teaching materials increases student satisfaction with the MBA e-learning services.

Bulletin board and forum services enable improved communication of the students with their respective course teams and classmates. The bulletin board provides a one way communication from the team to the students. The forum allows interactivity, although, in many occasions some students just read the postings, but never participate.

H6b: Satisfaction with bulletin board and forum services increases student satisfaction with the MBA e-learning services.

An online submission system accelerates the process of task handling and provides students with fast timely feedback on their work. This supposedly simple feature was found as the most valued online activity by graduate Management Information Systems students (Levy 2006).

H6c: Satisfaction with the online submission system increases student satisfaction with the MBA e-learning services.

Online interaction with other students' measure is also important. In one study of online MBA students, the students indicated that the virtual teaming experiences in the courses were beneficial and helped them develop virtual team skills, which they perceived as important in the global business environment (Kim et al. 2005).

H6d: Online interaction with other students increases student satisfaction with the MBA e-learning services.

Finally, students must access the websites in order to enjoy the benefits of the communication services (e.g., if students do not access the website, they may miss important messages from the course team). Accordingly,

H6e: Higher frequency of e-learning services use increases student satisfaction with the MBA e-learning services.

Technical characteristics refer to tools provided by the website which may enhance learning, and are comprised of two constructs, as follows.

Auxiliary technical e-learning services include optional activities that enhance the learning process or interaction among students, and represent a more advanced use of e-learning, such as links to relevant websites, group activities in the course forum, chat with other student, and a personal electronic notepad which enables students to record online their own remarks regarding the learning material.

H7a: Satisfaction with auxiliary technical e-learning services increases student satisfaction with the MBA e-learning services.

Video lectures provide students with another channel to learning, and enable students to watch the learning session multiple times when and where convenient.

H7b: Satisfaction with video lectures increases student satisfaction with the MBA e-learning services.

The last hypothesis addresses the linkage between the two constructs which measure student retention:

H8: Students who are more inclined to withdraw the MBA will be less willing to recommend the program to others.

The model was controlled for the following variables: the student need of a distance learning program; student self-reported ability to cope with the learning load; age; gender; average grade; number of courses taken and successfully completed.

#### Methodology

Data were collected through a survey given to students currently enrolled in the MBA program at the Open University of Israel. The Open University is a distance learning institute that offers its students the choice of a full distance learning model or a blended model. In the blended model, the students combine a few face-to-face meetings with online support through course websites to supplement traditional means of distance education, such as books and study guides. The MBA program, inaugurated in October 2002, accepts applicants with an undergraduate grade point average of 80% or above. Candidates from other disciplines are required to take up to six supplementary courses, and complete these with course grade average of 75% or above. Most of the students work full time, and the flexibility offered by the MBA program enables them to study.

The survey was conducted in the spring of 2006. It addressed students who were enrolled in at least one course of the MBA program, excluding those who were still at the supplementary courses stage.

Three veteran course coordinators, who have been responsible for teaching the MBA program courses for over three years, reviewed the pilot questionnaire. After minor adjustments, the questionnaire was then pre-tested by 44 students. Following this pre-test, the questionnaire was refined again. Next, all the 1,916 students that were enrolled in the Open University MBA program courses were contacted via email and asked to complete an anonymous online survey. The answers received from 520 students represent a 27.1% response rate. Non response bias was assessed by comparing the 390 early respondents and the remaining 130 who responded only after a reminder email was sent to them based on Armstrong and Overton (1977). A MANOVA analysis that compared the answers to all the questions between these two groups showed an insignificant difference (Wilks' Lambda =.798, F=1.157, p=.172).

#### Results

Table 1 presents demographic characteristics of the students who participated in the survey. There were no gender differences in the model except that women tended to cope better with the MBA program learning load. Older students were more satisfied with the knowledge they gained, as well as with the MBA e-learning services. Students with higher average course grades were more satisfied with the e-learning services, but otherwise the grades had no influence. Students who successfully completed more courses were less inclined to withdraw and were more able to handle the learning load. The senior students were also less willing to recommend the program (all these findings are presented in Figure 2, and further explained below).

Gender	50.8% Men; 49.2% Women											
Age	21-25	26-30	31-35	36-40	41-50	Over 50						
	3.7%	32.9%	34.0%	14.0%	12.7%	2.7%						
Completed courses	None	1-3	4-6	7-9	10-12	Over 12						
(out of 15 required for an	None	courses	courses	courses	courses	courses						
MBA)	17.5%	26.0%	18.8%	15.0%	11.2%	11.5%						
Average grade	No grades vet	Less than 75	76-80	81-85	86-90	91-100						
	18.1%	7.1%	19.0%	28.9%	20.2%	6.7%						

#### Table 1. Demographics of Participants

Partial Least Square (PLS-Graph 3.00 Build 1126) was used to analyze the data since PLS is well suited to explaining complex models with latent variables (Wold 1985, p.590). PLS is a structured equation modeling method that analyzes how the items load on their constructs simultaneously with estimating all the paths in the model, and in recent years it is widely used in MIS research (Gefen and Straub 2005). PLS estimates all paths, loadings, the Average Variance Extracted (AVE) of principal constructs, and construct reliability. Convergent and discriminant validity are shown when each item loads much higher on its assigned factor than on any other factor and when the square root of the AVE of each construct is much larger than the correlation of that construct with all other constructs (Chin 1998; Chin et al. 2003).

A PLS confirmatory factor analysis (CFA) confirmed that all items loaded well on their respective factors, and all the construct loadings were much higher than the cross loadings (the CFA results are omitted for brevity). Appendix A details the mean, standard deviation and PLS Reliability of the constructs, as well as the correlation among the constructs and their square root of the AVE which show that the square root of all AVEs is much larger than all other cross correlations. All these measures are above the limit values suggested in the literature (Gefen et al. 2000). Therefore, the findings support adequate convergent and discriminant validity of the constructs.

Figure 2 presents the PLS results for the suggested research model. The standardized PLS path coefficients are shown on top of the arrows, all are significant at least at the .05 level. The constructs included in the technical characteristics of e-services did not influence the overall satisfaction with the MBA e-learning services, hence Hypotheses 7a and 7b were not supported. These two arrows are shown in Figure 2 with no coefficient values. All the other insignificant links were removed from Figure 2. The values of the variance explained (R squared) are shown under the box of the relevant constructs. The suggested model explained 53% of the variance in willingness to recommend the program, 32% of the variance in Inclination to

withdraw, 56% of the variance in satisfaction with the MBA e-learning services and 38% of the variance in satisfaction with the knowledge gained by the students.

The findings demonstrate the importance of social norms in the context of student retention, although there is no direct influence of social norms on the retention constructs, these norms were found to significantly influence all the constructs which affect retention. H1a, H1b and H1c, asserting a positive influence of social norms on satisfaction with the knowledge gained, the MBA personnel and e-learning services, were all supported. Social norms were also found to significantly increase student ability to cope with the learning load and online interaction with other students, which both directly influenced retention, as well as frequency of e-learning use which indirectly contributed to retention.

Willingness to recommend the MBA was positively affected by satisfaction with the knowledge gained, the MBA personnel, thus corroborating H2a and H3a, but it was not significantly influenced by satisfaction with the MBA e-learning services, so H5a was not supported. Inclination to withdraw the MBA was significantly influenced by satisfaction with the knowledge gained and e-learning services, as H2b and H5b hypothesized. Although satisfaction with MBA personnel had no significant influence on inclination to withdraw, as proposed in H3b, it had significantly affected both satisfaction with the knowledge gained (b=0.53) and satisfaction with e-learning, hence supporting H4 and H3c respectively.

All the communicational characteristics were found to affect satisfaction with e-learning services, therefore supporting H6a, H6b, H6c, H6d and H6e. But, as already mentioned, H7a and H7b, relating to the influence of technical characteristics on satisfaction with e-learning services, were not supported by the findings. As expected, H8, claiming that students who are more inclined to withdraw will be less willing to recommend the MBA, was validated.

Two additional constructs emerged as having substantial influence on retention: the first was online interaction with other students, that was hypothesized to positively influence satisfaction with e-learning (H6d) but also significantly influenced recommendation, as well as satisfaction with personnel (b=0.27) and with the knowledge gained. The second construct was student ability to cope with the learning load, which was added to the model as a control variable. Although it was significantly influenced by social norms, as well as three control variables: need of distance learning, courses taken and gender, they explained only 8% of the variance. Nevertheless, ability to cope with learning load was found to have significant affect on recommendation (b=0.26) and withdrawal intentions (b=-0.21).

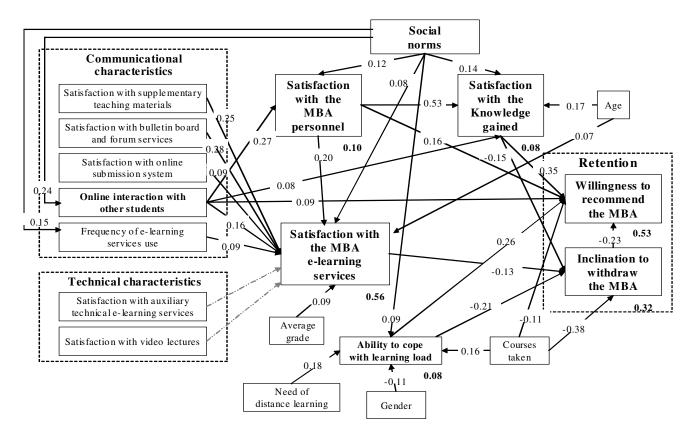


Figure 2. PLS Results for the Proposed Research Model

#### Discussion

#### Key Findings

Social norms had a significant effect on all the main constructs which directly influence retention: satisfaction with the knowledge gained, the MBA personnel and e-learning services, student self-reported ability to cope with the learning load, and student online interaction with other students. Overall, the findings emphasize the importance of the human elements, whereas the influence of the MBA e-learning services on retention was reflected only in reducing inclination to withdraw, but not in willingness to recommend the program.

#### Implications to Theory

The main theoretical contribution of this study is the validation of the influence social norms has on student retention in MBA programs, over and above the effects of experience with the MBA program itself. Recognizing this centrality of social norms is key because while it is occasionally recognized in MIS research (e.g., Karahanna et al. 1999), it has received little attention. Another key theoretical contribution is supporting the TPB view that social norms do not affect behavioral intentions directly. In contrast, social identification theory (Tajfel 1970; Tajfel 1978), which has also been studied in the context of IT adoption (Gefen and Ridings 2003), does claim such a direct effect. Thus, the study contributes to resolving this theoretical contradiction. Another important contribution is empirically identifying online interaction with other student as a factor which enhances retention, as suggested by Simpson (2003, p. 129) who proposed that interactivity with the course team, as well as among students, is a key element in increasing retention.

Additionally, the concept of social norms, while applied quite often to IT adoption, has never been applied before to this unique context which, in contrast to other types of IT, is exposed to a wide variety of unrelated social influences. Within this context, we also show that the effect of social norms is on several aspects of satisfaction, i.e. not only on IT related aspects as could have been extrapolated based on previous research. Social norms affect not only beliefs about the IT, as shown by previous research, but also increases satisfaction with the people associated with the IT and the service it is there to support.

#### **Implications to Practice**

Since social norms are vital to retention, MBA program chairs should consider social norms management practices. Although social norms are beyond the control of the school, there are actions that can be taken which may influence these norms. Social norms management may be carried out simultaneously in two approaches: activities by the MBA program team that enhance positive social norms toward MBA studies, and focused actions by the program team that create or reinforce norms of using e-learning services which were found to have a substantial effect on retention. Positive social norms toward MBA studies and the people who are important to them, and may include actions like periodical publications which include graduate success stories, symposia and social events that create an opportunity for family and friends to be exposed to positive aspects of the studies and the institute.

As Karahanna et al. (1999) found, the use of social norms may be important in inducing initial use of information technology. Our findings show that social norms significantly influenced online interaction with other students, which was the only elearning tool that directly affected willingness to recommend the program, as well as satisfaction with the MBA personnel and the knowledge gained. In many cases, the interaction is voluntary, therefore there are students whose level of interactivity is minimal, or they do not interact at all. Instructors can encourage, or even oblige students to interact by attributing grade points to particular kinds of interaction (equivalent to participation in face-to-face classes). Also, the instructors may create a norm of frequent student visits to the course website, by gradually posting materials which the students value, like presentations and task solutions, throughout the semester, or posting a weekly briefing.

#### **Conclusions, Limitations and Further Research**

This research emphasizes the prominence of the human factor to the success of MBA programs. Although technological advances enable advanced sophisticated ways of learning, and provide students with flexibility in time and place of study, it

is the people that make the difference.

MBA programs vary in many aspects, and the people involved, both the MBA personnel and classmates, make each learning experience unique. The data were collected from one blended MBA program, and additional research in different environments is required in order to generalize these findings. Even in the context of the same MBA program, some elements may change over time, e.g., as students and instructors become more sophisticated in their use of technological characteristics of e-learning services, these constructs may significantly influence student satisfaction with the MBA e-learning services.

This study has shed light on the importance of social norms in determining MBA programs success, and contributed to better understanding of the factors affecting student retention, we hope that it will encourage other researchers to further examine the role of social norms in influencing student persistence, as well as the quality of learning. Examining social norms influence on retention in these groups appears as a promising line of future research.

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## Appendix A. Mean, Standard Deviation, PLS Reliability, Correlation among the Constructs and their Square Root of the AVE

19.	18.	17.	16.			13	12	Ē	10.	9.	œ.	7.	6.	5.	4.	ώ	2.	
Satisfaction with online submission system	Need of distance learning	Frequency of e-learning services use	Social norms	Online interaction with other students	satisfaction with video lectures	Satisfaction with the Knowledge	Satisfaction with the MBA personnel	Ability to cope with learning load	Age	Gender	forum services Grade average	Satisfaction with bulletin board and	courses taken	e-learning services Satisfaction with supplementary	Satisfaction with auxiliary technical	Satisfaction with the MBA e-	Inclination to withdraw the MBA	Willingness to recommend the MBA
5.4	4.4	3.4	6.2	3.8	4.6	5.3	4.9	3.8	4.1	1.5	3.3	5.3	3.1	6.2	3.8	5.6	1.9	Mean 5.0
1.6	1.0	0.9	0.8	1.5	1.8	1.2	1.2	1.4	1.2	0.5	1.9	1.3	1.6	1.0	1.3	0.9	1.1	SID F 1.7
0.83	0.79	0.87	0.80	0.84	0.88	0.93	0.86	0.88	NA	NA	NA	0.84	NA	0.87	0.86	0.94	0.88	STD Reliability 1.7 0.98
0.18	0.19	0.10	0.20	0.30	0.13	0.58	0.54	0.46	0.07	-0.08	0.05	0.24	0.06	0.25	0.29	0.41	-0.43	1. <b>0.96</b>
-0.15	-0.07	-0.04	-0.14	-0.08	-0.13	-0.28	-0.26	-0.34	-0.05	0.02	-0.26	-0.20	-0.44	-0.27	-0.13	-0.31	0.84	2
0.33	0.16	0.28	0.28	0.45	0.25	0.45	0.45	0.25	0.02	0.08	0.21	0.57	0.12	0.54	0.43	0.69		ω
0.28	0.16	0.15	0.20	0.51	0.36	0.35	0.38	0.20	0.06	-0.05	0.02	0.41	0.02	0.42	0.68			4.
0.26	0.10	0.11	0.19	0.29	0.24	0.32	0.30	0.15	-0.06	0.09	0.19	0.43	0.16	0.84				Ś
0.12	0.10	0.09	0.03	0.04	0.10	0.05	-0.02	0.18	0.07	0.04	0.54	0.11	1.00					6.
0.27	0.17	0.27	0.22	0.38	0.31	0.29	0.28	0.15	-0.07	0.11	0.19	0.85						7.
0.06	0.07	0.19	0.06	-0.05	0.16	0.06	0.01	0.12	0.00	0.03	1.00							œ.
0.05	0.00	0.07	0.17	-0.04	0.06	-0.03	-0.05	-0.09	-0.23	1.00								.9
-0.01	0.05	0.14	-0.19	-0.06	0.02	0.13	-0.02	0.03	1.00									10.
0.08	0.20	0.03	0.08	0.16	0.10	0.20	0.32	0.76										11.
0.22	0.15	0.05	0.18	0.30	0.18	0.58	0.78											12
0.21	0.15	0.12	0.22	0.26	0.20	0.90												13.
0.34	0.33	0.15	0.14	0.23	0.84													14.
0.22	0.13	0.25	0.24	0.80														15.
0.15	0.05	0.15	0.75															16.
0.09	0.05	0.88																17.
0.17	0.81																	18.
0.84																		19.

10