

Examining Religiosity and Its Relationship to Self-Control, Procrastination and Academic Achievement*

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Abstract: This paper examines the relationship between religiosity level and general self-regulation as well as academic self-regulation. A study was carried out on 23 male and 122 female undergraduate students to examine the relationship between Islamic religiosity level and self-control, procrastination, academic control and academic achievement. Results indicate that religiosity is significantly correlated to all the above factors except for academic achievement. The authors examine the concept of volition or 'will-power' from the Islamic perspective and compare it with the Western perspective. They further propose an Islamic musabarab scale to measure an individual's level of volition according to the Islamic perspective.

INTRODUCTION

One of the biggest concerns of educators in Malaysia is low academic self-regulation and low achievement among Malay university students (Sulaiman Yassin, 2001). Symptoms of low self-regulation can easily be observed in the prevalence of academic procrastination: tardiness, absenteeism, last minute studying, and turning in a hastily prepared assignment past the deadline.

Procrastination and low academic achievement can be explained using the framework of self-regulation. Low academic

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achievement can be attributed to one's low level of general self-regulation, or specifically, one's low level of academic self-regulation (Zimmerman, 1998). The low level of self-regulation can be attributed to some deficit in the education system or the socio-cultural training which may not be conducive to the optimal development of self-regulation (Sulaiman Yassin, 2001).

Among the skill deficits in self-regulation is low volitional control (Corno, 1989). Newly introduced in the literature of self-regulation, volitional control has not yet been studied adequately. Although most educators agree that having 'will-power' is important, not many studies have focused on how this skill is acquired in normal human development or in a specific cultural context. One important development needed is a method of training students to raise their level of volitional skills or strength (Corno, 1989; Corno & Zimmerman, 1992). However, existing studies on volitional control are still at the stage of clarifying the constructs involved, examining volitional processes, and studying relationships with other constructs and outcomes (Pintrich, 1999). Is volition an inner strength that works like a psychological muscle or is it simply a set of strategies? Is it a trait that is stable across time, or does it vary with each situation? These are some of the questions which have to be answered before further progress can be made.

On the other hand, the role of volitional control and its acquisition is a dominant aspect of self-regulation from the Islamic perspective. Volitional strive is considered virtuous and commendable; and volitional training is an important part of Islamic education. For example, Al-Ghazzaliyy, in giving his many different definitions of intellect or "*aqal*" described an "*aqil*" person as "he whose development of the instinct is advanced so that he would be able to tell what the end will be, and have the power to conquer and subdue his desire for immediate pleasure so that he could achieve the long term goals" (Al-Ghazzaliyy, cited in Abu Sway, 1996). This is similar to the Western definition of emotional intelligence, with one of its components - the ability to delay gratification. Al-Ghazzaliyy also mentioned that *aqil* is one of

the qualities that distinguish man from animals. In his advanced study of this construct, Al-Ghazzaliyy even observed developmental patterns. He wrote that the intellect follows a course of development that begins at the age of discernment or "*tamyiz*"¹, which is between the ages of five and seven and reaches its completion at the age of forty. This view is similar to, but not the same as the Western view of the ability to delay gratification which starts at the age of three and peaks at seven (Mischel & Metzner, 1962). The stark difference between these two views concerning the age of peaking, or completion, could be because of the different views on what volitional training is.

A present-day Islamic scholar identified the construct of volition as *musabarab*. His definition of *musabarab* is the capacity, or potential, to withstand hardship and overcome obstacles in order to achieve a distant or unseen goal such as a future job or a place in heaven (Muhammad Nuruddin, personal communication, June 21, 2002). According to him, this capacity or strength results from a combination of belief, or faith, in the distant, or unseen, result plus the strength of habit. The more familiar a task is, the easier it will be to have *musabarab* in the task.

As suggested by Pintrich (2000), examining the Islamic perspective might contribute to the Western knowledge on volitional control by adding new constructs and introducing a different framework.

Religiosity has been studied in Western psychology. However, the focus has been on several constructs with negative connotations on religiosity. For example, high religiosity has been related to prejudice (Feagin, 1964), violence (Ibrahim, 1980), dogmatism (Rokeach, 1965; Seaman, Michel, & Dillehay, 1971),

¹ *Tamyiz* is the age of discernment acknowledged in the book of laws (*syariat*). It is a developmental age where children can discriminate between right and wrong. Al-Ghazzaliyy suggested that this newly acquired sense or ability can be tested by judging whether a child can take care of his/her hygiene needs independently i.e. if a parent is confident that a child can clean himself/herself after going to the toilet, the child is considered a *tamyiz* person. A *tamyiz* person is considered trainable in terms of being accountable for his/her own conduct. As a further step in Islamic volitional training, the child's parents need to start instructing him/her in carrying out rituals such as prayers and fasting.

and dissatisfaction with sex and marriage (Davidson & Darling, 1995). Only recently have there been studies with favorable views on religiosity such as studies on mental health (Feroz & Brown, 1994; Atchley, 1997), academic achievement (Zem, 1989; Brody, Stoneman, & Flor, 1996; Hae-Seong, 2001), and marital stability (Call & Heaton, 1997).

Many Muslim psychologists believe that religiosity plays an important role in shaping the life and personality of Muslims. However, studies are lacking possibly because of the lack of good Islamic religiosity measures.

This study examines the relationship of religiosity to academic achievement and several constructs important to academic self-regulation, which are self-control, perceived academic control, and procrastination. The researchers predicted that all the examined constructs would be correlated with religiosity.

METHOD

Participants

The participants were 23 male and 122 female undergraduate students from a research methods class at Universiti Utara Malaysia. Their ages ranged from 21 to 24 years. Only Muslim participants were included in this study. The ratio for gender in this population was lower than the ratio for the general Malay student population at the university, but since all Muslim students participated, it should reflect the ratio for the particular undergraduate programs. (Communication and Social Work). The students were given a series of instruments to measure their level of religious commitment, self-control and tendency for procrastination.

Instruments

All instruments were administered in Bahasa Malaysia.

Religiosity: The Islamic Religious Commitment Scale (*Skala Komitmen Islam*) was constructed by the researchers and had undergone the preliminary process of refinement and

validation (Nadiyah Elias, Mohd Noor Habibie, Amir Awang, & Mahmood Nazar Mohamed, 2003). The scale has twenty-four items that measure behaviors reflecting adherence to the Islamic regulations. Most of the items are about ritualistic or *ibadah* behaviors. The scale used was a five-point Likert scale ranging from 1 (*very true*) to 5 (*very untrue*). Cronbach's alpha values were .84 for males and .92 for females.

Self Control 1: Rosenbaum's Self Control Scale has 36 items, and measured an individual's resourcefulness or ability to initiate self-control skills and behaviors in adverse situations (Rosenbaum, 1983). The scale measured three areas associated with self-control, including the use of cognition and self-instruction, problem-focused coping, and perceived self-efficacy in one's ability to self-regulate events and to delay gratification. This scale is in a visual analog format ranging from -3 to +3, which was then converted to positive scores. Total scores could range from 1 to 2100. Rosenbaum (1990) reported a Cronbach's alpha of .83. Cronbach's alpha for this study was .83.

Self Control 2: The Barrat Impulsivity Scale was translated from the original scale with a few adaptations for the Malaysian student population (Barratt, 1994). For example, the item "I spend or charge more than I earn" was adapted to "I spend money till I get into debt" (*Saya berbelanja sehingga perlu berbutang*). The author has not found any reliability study for this measure. Cronbach's alpha for this study was .79.

Self-Control 3: The Frustration Tolerance Scale was taken from the Munich Personality Test. The six-item section measured perceived level of frustration tolerance. All the items are positively worded and closely similar which lead to a high inter-item consistency. The author has not found a reliability record for the frustration tolerance section only. Cronbach's alpha in this study was .82.

Self-Control 4: The Conscientiousness Scale had items taken from Cattell 16-PF which was already translated and tested on the Malaysian population (Mahmood Nazar Mohamed, 1995). The scale consists of 10 items measuring an individual's degree of

adherence to rules and conventions. The items used a three-word choice format. The Cronbach Alpha for this study was low: 0.34. Therefore the results with the scale needed to be treated with caution.

Procrastination: The procrastination log was translated from the Strong Procrastination Log (1979), revised by Lopez and Wambach (1982). The original scale contained 11 items. One item, "I spent time thinking about procrastination and what I could do about it" was eliminated due to low correlation with the other items. The measure used a 7-point Likert scale ranging from 1 (*true*) to 7 (*Not true*). Lopez and Wambach reported a Cronbach's alpha coefficient of .67; the Cronbach Alpha this study was .72.

The Tuckman's Procrastination Scale is a 35-item scale measuring general procrastination tendencies (Tuckman, 1991). The measure used a four-point Likert scale ranging from 1 (*Definitely me*) to 4 (*definitely not me*). Tuckman reported a Cronbach Alpha of .86. Cronbach's alpha for this study was .87.

Perceived Control: The Perceived Academic Control Scale was adapted from Kuhl's Academic Control Scale (Kuhl & Kraska, 1988). The scale has eight items measuring on individual's perceived control in the academic area and used a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Cronbach's alpha for this study was .63.

Procedures

All instruments were administered to the students during two class meetings. The researchers explained that participation would contribute toward testing and validating the instruments for the Malaysian population, and that the students would be contributing towards increasing the number of instruments in Malay. To evoke interest, students were also told to evaluate the instruments for usefulness in their own future research. To ensure equal treatment across participants and across instruments, the start and completion times were announced for each instrument, with breaks and discussion on the test format and quality of translation in between

the administration of each instrument. This method was to reduce instrument fatigue.

Academic achievement scores were later obtained from official university records. The profile for each participant consisted of a CGPA, a religiosity measure, four self-control measures, two procrastination measures, and one perceived academic control measure. All the measures were analyzed using Pearson correlations.

RESULTS

The results showed that, as predicted by the hypotheses, religiosity was significantly and positively correlated with all measures of self-control and perceived academic control, and significantly and negatively correlated with both measurements of procrastination (See Table 1 and Table 2). However, the analysis failed to establish significant correlation between religiosity and academic achievement. Among all the variables, only conscientiousness and

Table 1: *Correlations of Religiosity with Other Variables*

Scales	r
S. Control: Rosenbaum Self-Control Scale	0.33*
S. Control 2: Barrat Impulsiveness Scale	-0.49*
S. Control 3: Munich Personality Test- Frustration tolerance	0.22*
S. Control 4: Cattell-16 PF-Conscientiousness Scale	0.19*
The Procrastination Scale (Tuckman)	-0.53**
Procrastination Log (Strong 1979)	-0.30**
Academic Control Scale	0.20*
Grade Point Average	0.12

* $p < 0.05$ ** $p < 0.01$

Table 2: *Correlations of Academic Achievement with Other Variables*

Scales	r
Islamic Commitment Behavioral Scale	0.12
S. Control 1: Rosenbaum Self-Control Scale	0.01
S. Control 2: Barrat Impulsiveness Scale	-0.15
S. Control 3: Munich Personality Test-Frustration tolerance	-0.07
S. Control 4: Cattell-16PF- Conscientiousness Scale	0.20*
Procrastination Log (Strong 1979)	-0.05
The Procrastination Scale (Tuckman)	-0.04
Academic Control Scale	0.26*

* $p < 0.05$ ** $p < 0.01$

perceived academic control significantly correlated with academic achievement.

DISCUSSION AND CONCLUSION

Many studies have revealed a negative relationship between self-control, or self-regulation, and procrastination (Senecal & Koestner, 1995; McCann & Garcia, 1999). This study supported the same findings, and added support for the relationship between religiosity and self-regulation. This study has shown that religiosity was significantly correlated with self-control, and negatively correlated with academic procrastination. The findings imply that students who are high in religiosity tend to also score high in self-control and low in procrastination. The reason for this could be because Islam is a highly structured religion requiring a high level of volition in adhering to its regulations. Educators interested in raising students' level of self-regulation could benefit from examining how

religious training could help in raising the level of volition and self-regulation.

Studies have shown that students high in self-control and low in procrastination would do well in their academic studies (Senecal & Koestner, 1995; McCann & Garcia, 1999). It would follow that students who scored high in religiosity would also score high in academic achievement. However, results from this study did not support this notion. In this study, the religiosity level did not significantly correlate with academic achievement.

In seeking an explanation for this, the researchers examined correlations among other factors. The study also did not support common findings on the relationship between self-regulation, self-control, procrastination, and academic performance. Studies have established a positive relationship between self-control and academic performance (Eccles, 1983; Alexander & Judy, 1988; Garcia & Pintrich, 1994), and a negative relationship between procrastination and academic achievement (Beswick & Man, 1994; Wesley, 1994). Several studies have also pointed to relationships between religiosity and academic performance (Zern, 1987, 1989). It was expected that all the tested factors would be strongly correlated with academic achievement. However, in this study, none of the regular correlates proved to be significant. The only significant correlates were academic control and conscientiousness.

This is an interesting finding and should be further examined. Are the findings irregular or do they reflect findings for the general population in Malaysia? This study was part of an experimental design, and did not use a sampling frame that would be proper for correlational studies, so there are limitations in generalizing the results to the student population in Malaysia. However, the results can be used to direct future studies. A stronger design would include representative sampling of the Malaysian student population to determine whether correlates for academic performance for the Malaysian population are different from the correlates for Western population. Separate studies should be carried out for secondary school students and university students. With proper sampling, we would be able to confirm

whether religiosity and academic self-regulation are related to academic achievement. If they are not related, we would need to find out the correlates of academic achievement for Malaysian students.

The study failed to establish a significant relationship between religiosity and academic achievement, but it was able to show a strong correlation between religiosity and self-control, and a strong negative correlation between religiosity and procrastination. This study has, however, shown that religiosity plays an important role in academic self-regulation.

The researchers suggest that volition is the key construct in the relationships among the variables. Commitment to the Islamic way of life requires volition, and practicing the Islamic way of life promotes volitional power. Volition is strongly connected to self-control and self-regulation (Corno, 1986), which in turn influence success in many areas of life such as academic achievement (Zimmerman, 1995; Corno, 2001). Further studies need to be carried out to clarify and refine the relationships among these constructs. Interested researchers can construct instruments directly measuring volitional constructs, and compare them with religiosity, self-control, academic self-regulation, academic procrastination, and academic performance.

The role of volitional control and its acquisition are very dominant aspects of self-regulation from the Islamic perspective. It would not be difficult to extract from the traditional Islamic educational practice some practical training strategies of volitional control applicable to contemporary Muslim students. Carried further, these practices can be modified to be used universally in systematic volitional strength training.

Studying volition and self-regulation from the Islamic perspective will help Muslims use their traditional resources in coping with contemporary challenges. This might prove to be more effective than adopting the Western model(s) in toto (Graham, 1992; Betancourt & Lopez, 1993; Boekaerts, 1998; Pintrich, 1999).

REFERENCES

- Abu-Sway, M. (1996). *Al-Ghazzaliyy: A study in Islamic epistemology*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Alexander, P. A., & Judy, J. E. (1988). The interaction of domain specific and strategic knowledge in academic performance. *Review of Educational Research*, 58, 375-404.
- Atchley, R. C. (1997). The subjective importance of being religious and its effect on health and morale 14 years later. *Journal of Aging Studies*, 11(2), 131-141.
- Barratt, E. S. (1994). Impulsivity: Integrating cognitive, behavioral, biological and environmental data. In W. B. McCown, J. L. Johnson & M. B. Shure (Eds.), *The impulsive client: Theory, research and treatment* (pp. 39-56). Washington D.C.: American Psychological Association.
- Beswick, G., & Man, L. (1994). State orientation and procrastination. In J. Kuhl & J. Beckmann (Eds.), *Volition and personality: Action versus state orientation* (pp. 391-396). Gottingen, Germany: Hogrefe.
- Betancourt, H., & Lopez, S. (1993). The study of culture, ethnicity, and race in America psychology. *American Psychologist*, 48, 629-637.
- Boekaerts, M. (1998). Do culturally rooted self-constructs affect students' conceptualization of control over learning? *Educational Psychologist*, 33, 87-108.
- Brody, G. H., Stoneman, Z., & Flor, D. (1996). Parental religiosity, family processes, and youth competence in rural, two-parent African American families. *Developmental Psychology*, 32, 696-706.
- Call, V. R. A., & Heaton, T. B. (1997). Religious influence on marital stability. *Journal for the Scientific Study of Religion*, 36(3), 382-392.
- Corno, L. (1986). The metacognitive control components of self-regulated learning. *Contemporary Educational Psychology*, 11, 333-346.

- Corno, L. (1989). Self-regulated learning: A volitional analysis. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and individual achievement*. New York: Springer-Verlag.
- Corno, L. (2001). Volitional aspects of self-regulated learning. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement* (pp. 191-226). Mahwah, NJ: Lawrence Erlbaum.
- Corno, L., & Zimmerman, B. J. (1992). Encouraging students to take responsibility for learning and performance. *Elementary School Journal*, 93, 69-83.
- Davidson Sr, J. K., & Darling, C. A. (1995). Religiosity and the sexuality of women: Sexual behavior and sexual satisfaction revisited. *Journal of Sex Research*, 33(3), 235-243.
- Eccles, J. (1983). Expectancies, values, and academic behaviors. In T. Spencer (Ed.), *Achievement and achievement motives* (pp. 75-146). San Francisco: Freeman.
- Feagin, J. (1964). Prejudice and religious type: A focused study of Southern fundamentalists. *Journal for the Scientific Study of Religion*, 4, 3-13.
- Feroz, A., & Brown, D. (1994). Religious predictor of cigarette smoking: Findings for African American women of childbearing age. *Behavioral Medicine*, 20(1), 34-43.
- Garcia, T. E., & Pintrich, P. R. (1994). Regulating motivation and cognition in the classroom: The role of self-schemas and self-regulatory strategies. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulation of learning and performance: Issues and educational application* (pp. 127-153). Hillsdale, NJ: Erlbaum.
- Graham, S. (1992). "Most of the subjects were White and middle class": Trends in published research on African Americans in selected APA journals, 1970-1989. *American Psychologist*, 47, 629-639.
- Hae-Seong, P. (2001). Religiousness as predictor of academic achievement performance among high-school students. *Journal of Research on Christian Education*, 10(2), 361-378.

- Ibrahim, S. E. (1980). Anatomy of Egypt's Militant Islamic groups: Methodological note and preliminary findings. *International Journal of Middle East Studies*, 12, 423-453.
- Kuhl, J., & Kraska, K. (1988, April). *Action control and learning: From metacognition to metamotivation*. Paper presented at the the Minnesota Symposium on Learning and Individual Differences: Abilities, motivation and methodology, Minneapolis, MN.
- Lopez, F.G., & Wambach, C.A. (1982). Effects of Paradoxical and self-control directiveness in counseling. *Journal of Counseling Psychology*(29), 115-124.
- Mahmood Nazar Mohamed. (1995). *Perubahan psikologikal dari segi harga diri, profail personaliti dan penggunaan mekanisme bela diri di kalangan penagih dadah yang mengikuti program pemulihan dadah Serenti*. {*The psychological changes of drug addicts in Serenti Rehabilitation Centers: self-esteem, personality profile, and the use of defence mechanisms*}. Unpublished PhD thesis, Universiti Kebangsaan Malaysia, Bangi.
- McCann, E. J., & Garcia, T. (1999). Maintaining motivation and regulating emotion: Measuring individual differences in academic volitional strategies. *Learning & Individual Differences*, 11(3), 259-279.
- Mischel, W., & Metzner, R. (1962). Preference for delayed reward as a function of age, intelligence, and length of delay interval. *Journal of Abnormal and Social Psychology*, 64, 425-431.
- Nadiyah Elias, Mohd Noor Habibie, Amir Awang, & Mahmood Nazar Mohamed. (2003, May). *Skala komitmen tingkahlaku keagamaan: Penilaian awal kebolehpercayaan, kesahan gagasan dan beberapa perkaitan*. {*The Islamic Religious Commitment Scale(IRC): Initial validation and some correlates*}. Paper presented at the Annual Conference of the Malaysian Psychological Association, Langkawi, Malaysia.
- Pintrich, P. R. (1999). Taking control of research on volitional control: Challenges for future theory and research. *Learning & Individual Differences*, 11(3), 335-354.

- Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekarts, P. R. Pintrich & M. Zeidner (Eds.), *Handbook of Self Regulation* (pp. 451- 502). San Diego, CA: Academic Press.
- Rokeach, M. (1965). Political and religious dogmatism: An alternative to the authoritarian personality. *Psychological Monographs*, 70, 365-375.
- Rosenbaum, M. (1983). Learned resourcefulness as a behavioral repertoire for the self-regulation of internal events: Issues and speculations. In C.M. Franks & Y. Jaffe (Eds.), *Perspective in behavior therapy in the eighties* (pp. 54-73). New York: Springer.
- Resenbaum, M. (ed.). (1990). *{foreword} Learned Resourcefulness*. New York: Springer.
- Seaman, J. M., Michel, J. B., & Dillehay, R. C. (1971). Membership in orthodox Christian groups: adjustment and dogmatism. *Sociological Quarterly*, 12, 252-258.
- Senecal, C., & Koestner, R. (1995). Self-regulation and academic procrastination. *Journal of Social Psychology*, 135(5), 607-619.
- Sulaiman M Yassin. (2001). *Isu pencapaian pelajar Melayu {Issues in the academic achievement of Malay students}*. Paper presented at Kolokium Pemajuan Akademik Pelajar Melayu di Institusi Pengajian Tinggi, Genting Highlands, Malaysia.
- Tuckman, B. W. (1991). The development and concurrent validity of the Procrastination Scale. *Educational and Psychological Measurement*, 51, 473-480.
- Wesley, J. C. (1994). Effects of ability, high school achievement, and procrastinatory behavior on college performance. *Educational Psychological Measurement*, 54(2), 404-408.
- Zem, D. (1989). Some connections between increasing religiousness and academic accomplishment in a college population. *Adolescence*, 24(93), 141-154.
- Zern, D. S. (1987). The relationship of religious involvement to a variety of indicators of cognitive ability and achievement in college students. *Adolescence*, 22(88), 883-895.

- Zern, D. S. (1989). Some connections between increasing religiousness and academic accomplishment in a college population. *Adolescence*, 24(93), 141-154.
- Zimmerman, B. J. (1995). Self-regulated learning and academic achievement: An overview. *Educational Psychologist*, 35, 3-13.
- Zimmerman, B. J. (1998). Developing self-fulfilling cycles of academic regulation: An analysis of exemplary instructional models. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulated learners: From teaching to self-reflective practice* (pp. 1-19). New York: Guildford Press.