



## Time Management Competency As A Function Of Treatment, Discipline, Type Of Family And Their Interactions

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### Abstract

*There has been an emphatic emphasis on human resource management which was never before. While distributing the wealth, happiness, health, etc, god has discriminately distributed the same but it is the time which is evenly distributed. Whether you are a prime minister of a country or a common citizen, every body has got twenty four hours to use. Different people adumbrate the meaning of time in different ways. According to some, time is money. It is precious and valuable. Mostly people complaint about shortage of time. Some people say that they do not have time for doing certain activities. It means that people are not able to manage time. This reflects the importance of time management competency. It is a fact that people are not given training in time management and even the awareness of time management is not created. Related to time management researches have been conducted by sharma (1983), pore (1991), mocny (1993), steide (1994), wells (1994) and wells (1995). These studies highlighted the importance of time management. Time management can be improved by creating the awareness among people. So far no efforts have been made for creating awareness about different aspects of time management. Further the common observation is that people with science background and belonging to nuclear families are more conscious as compared to other streams and joint families. Time management competency can be facilitated through specifically developed self instructional material. The material alone may not go a long way in facilitating time management competency but the type of family and discipline of individuals do add to it. People with different discipline and type of family may benefit differently from the developed self instructional material. This has been the focus of this study.*

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**Objective :** The following was the objective of this study:

To study the effect of treatment, discipline, type of family and their various interactions on time management competency by taking pre- time management competency, intelligence and scientific temper as covariates.

**Hypothesis :** The following was the hypothesis of this study:

There is no significant effect of treatment, discipline, type of family and their various

interactions on time management competency by taking pre - time management competency, intelligence and scientific temper as covariates.

**Sample :** The sample comprised 342 students selected through stratified proportionate randomly sampling technique. Out of 342 students, 224 students (126 science, 33 arts and 65 commerce) were in the experimental group. These were from M.B. khalsa degree college and M.B. khalsa institution of education, indore. On the other



hand 118 B.Ed. Students (48 science, 51 arts and 19 commerce) were from the institute of education, Devi Ahilya Vishwavidyalaya, indore, and continued with traditional method and thus called control group. The sample represented the gender. There were 122 males and 102 females in experimental group. On the other hand 51 males and 67 females were in control group. All subjects were from urban area. Majority of them were day scholars. Their age ranged from 17 to 35 years. The medium of instruction in science, arts and commerce disciplines was Hindi as well as English.

**Design** : The present study was experimental in nature. The study was designed on the basis of non-equivalent control group design. There were two groups- one group was designated as experimental group and the other as control group. The students were taken as existed in the field. Only the sections were randomly selected but not the subjects within each section. Both the groups were administered time management competency scale.

The students of experimental group were given instructional material on time management. Each student was given one copy of the instructional material on time management. The students were asked to read the given instructional material in the classroom for one period. The duration of one period was 45 minutes. This continued for 15 working days spread over one month. During the experimentation, the experimenter was available.

Students were free to take help from the experimenter. On the other hand, no

instructional material was provided to control group. The control group continued with the traditional method. They were not given any information about the time management. At the end of the treatment both the groups were post tested with the help of tool that was used at pre-testing stage. Intelligence and scientific temper were assessed during the experimentation.

**Tools** : The variables assessed in this study were intelligence, scientific temper, and time management competency. The scientific temper of student was assessed with the help of scientific attitude scale developed by Sansanwal and Sathe. The raven's progressive matrices was used for assessing the intelligence of the students. The time management competency was assessed with the help of time management competency scale developed by the investigator. The time management competency was operationally defined as the process wherein well defined activity(ies) is/are sequenced so that the predetermined objectives/goals/aims can be achieved efficiently. According to Charles and I. Egendry time management comprised of four steps, namely, planning, organizing, leading and evaluating. These steps formed the basis of developing the time management competency scale. This scale consisted of 36 statements, of the 18 statements were positive and remaining were negative. A five point scale was used. The test-retest and split-half reliability coefficients were found to be 0.72 and 0.96 respectively. The content validity of the time management competency scale was



established by having a discussion with the experts from the field of management. On the basis of experts opinion the time management competency scale was found to be valid.

**Procedure of data collection :** The experiment was conducted on college students taken from M.B. Khalsa Degree College and M.B. Khalsa institute of education. The permission was taken from the principals of these colleges. To start with the rapport was established with the students. The students were explained the objectives of this study. After this, time management competency scale was administered. After this they were explained the procedure of reading the instructional material on time management. Each student was given one copy of instructional material on time management. Every day, they were allowed to read the given instructional material for 45 minutes in the class. The students were given one month time to read the instructional material. At the end, the time management competency scale was administered to the students in the same way as was done before reading the instructional material. During the experimentation, the data were collected in respect of intelligence and scientific temple by administering standardized tools. The administration was done as per instructions given in respective manuals. The same procedure was adopted in M.B. Khalsa Institution of Education. On the other hand, the students of the control group continued with their routine activities and traditional method. The same tools were administered

on students of the control group in the same way as done in the experimental group.

**Result :** The objective was to study the effect of treatment, discipline, type of family and their various interactions on time management competency by taking pre - time management competency, intelligence and scientific temper as covariates. There were two levels of treatment, namely instruction material on time management and traditional method. The students belonged to three disciplines, namely, science, arts and commerce. Further, students belonged to joint family and nuclear family. Thus there were two levels of treatment, three levels of discipline and two levels of type of family. Therefore, the data were analyzed with the help of 2x3x2 factorial design analysis of covariance.

The results are given in table 1.

Table 1: summary of 2x3x2 factorial design ancova for time management competency by considering pre-time management competency, intelligence and scientific temper as covariates

Source of variance	Df	Ssy.x	Mssy.x	Fy.x
Treatment (a)	1	11684.72	11684.72	61.73**
Discipline (b)	2	685.40	342.70	1.81
Type of family (c)	1	767.53	767.53	4.05*
A x b	2	386.56	193.28	1.02
A x c	1	2.97	2.97	0.02
B x c	2	803.80	401.90	2.12
A x b x c	2	142.80	71.40	0.38
Error	327	61899.64	189.30	
Total	341			

\*\*significant at 0.01 level \* significant at 0.05 level



## **Effect of treatment on time management competency By taking pre-time management competency, Intelligence and scientific temper as covariates**

From the table 1, it can be seen that the adjusted f-value for treatment is 83.64, which is significant at 0.01 level with  $df=1/339$ . It indicates that the adjusted mean scores of time management competency of students treated through instructional material on time management and traditional method differ significantly when pre - time management competency, intelligence and scientific temper were taken as covariates. So there was a significant effect of treatment on time management competency of students. In the light of this, the null hypothesis that there is no significant effect of treatment on time management competency of students when pre - time management competency, intelligence and scientific temper were taken as covariates is rejected. Further the adjusted mean score of time management competency of instructional material on time management group was 136.76, which is significantly higher than that of traditional method group whose adjusted mean score of time management competency was 121.93. It may therefore, be concluded that instructional material on time management was found to be superior to traditional method in enhancing time management competency of students when groups were matched in respect of pre - time management competency, intelligence and scientific temper.

Effect of discipline on time management competency Of students by taking pre-time management competency, intelligence and scientific temper as covariates

The adjusted f-value for discipline is 1.81 which is not significant (vide table 1). It indicates that the adjusted mean scores of time management competency of students belonging to science, arts and commerce disciplines did not differ significantly when pre - time management competency, intelligence and scientific temper were taken as covariates. So there was no significant effect of discipline on time management competency when pre - time management competency, intelligence and scientific temper were taken as covariates. Thus the null hypothesis that there is no significant effect of discipline on time management competency of students when pre - time management competency, intelligence and scientific temper were taken as covariates is rejected. It may, therefore, be said that science, arts and commerce students were found to have time management competency to the same extent when pre - time management competency, intelligence and scientific temper were taken as covariates.

Effect of type of family on time management competency Of students by taking pre-time management competency, intelligence and scientific temper as covariates

The adjusted f-value for type of family is 4.05, which is significant at 0.05 level with



df=1/327. It indicates that adjusted mean scores of time management competency of students belonging to joint family and nuclear family differ significantly when pre-time management competency, intelligence and scientific temper were taken as covariates. It reflects that the adjusted mean scores of time management competency of students belonging to joint and nuclear families differ significantly when pre-time management competency, intelligence and scientific temper were taken as covariates. So there was a significant influence of type of family on time management competency of students when pre-time management competency, intelligence and scientific temper were taken as covariates. Thus the null hypothesis that there is no significant effect of type of family on time management competency of students when pre-time management competency, intelligence and scientific temper were taken as covariates is rejected. Further, the adjusted mean score of time management competency of students belonging to nuclear family is 130.95 which is significantly higher than those of joint family whose adjusted mean score of time management competency is 127.31. It may, therefore, be said that students belonging to nuclear family were found to have better time management competency in comparison to students of joint family when both the groups were matched with respect to pre-time management competency, intelligence and scientific temper of students.

Effect of interaction between treatment & Discipline on time management

competency By taking pre- time management competency, Intelligence and scientific temper as covariates

The adjusted f-value for interaction between treatment and discipline is 1.02, which is not significant. It indicates that there was no significant effect of resultant of interaction between treatment and discipline on time management competency when pre-time management competency, intelligence and scientific temper were taken as covariates. Thus the null hypothesis that there was no significant effect of interaction between treatment and discipline on time management competency of students when pre-time management competency, intelligence and scientific temper of students were taken as covariates is not rejected. It may, therefore, be said that time management competency was found to be independent of the interaction between treatment and discipline of students when pre-time management competency, intelligence and scientific temper were taken as covariates.

Effect of interaction between treatment & Type of family on time management competency By taking pre- time management competency, Intelligence and scientific temper as covariates

From table 1, it can be seen that the adjusted f-value for interaction between treatment and type of family is 0.02, which is not significant. It indicates that there was no significant effect of resultant of interaction between treatment and type of family on



time management competency when pre-time management competency, intelligence and scientific temper were taken as covariates. Thus the null hypothesis that there was no significant effect of interaction between treatment and type of family on time management competency of students when pre-time management competency, intelligence and scientific temper of students were taken as covariates is not rejected. It may, therefore, be said that time management competency was found to be independent of the interaction between treatment and type of family of students when pre-time management competency, intelligence and scientific temper were taken as covariates.

Effect of interaction between treatment & Type of family on time management competency By taking pre-time management competency, Intelligence and scientific temper as covariates

The adjusted f-value for interaction between discipline and type of family is 2.12, which is not significant (vide table 1). It indicates that there was no significant influence of resultant of interaction between discipline and type of family on time management competency when pre-time management competency, intelligence and scientific temper were taken as covariates. In this context the null hypothesis that there is no significant effect of discipline and type of family on time management competency of students when pre-time management competency, intelligence and scientific temper were taken as covariates is not rejected. It may therefore be said that time

management competency was found to be independent of the interaction between discipline and type of family when pre-time management competency, intelligence and scientific temper were taken as covariates.

Effect of interaction among treatment, discipline & Type of family on time management competency By taking pre-time management competency, Intelligence and scientific temper as covariates

The adjusted f-value for interaction among treatment, discipline and type of family is 0.38, which is not significant (vide table 1). It indicates that there was no significant influence of resultant of interaction among treatment, discipline and type of family on time management competency when pre-time management competency, intelligence and scientific temper were taken as covariates. In this context the null hypothesis that “there is no significant effect of interaction among treatment, discipline and type of family on time management competency when pre-time management competency, intelligence and scientific temper were taken as covariates” is not rejected. It may, therefore, be said that time management competency was found to be independent of the interaction among treatment, discipline and type of family when pre-time management competency, intelligence and scientific temper were taken as covariates. Thus, irrespective of discipline and type of family to which students belong, instructional material on time management can be used to improve time management



competency of students when groups were matched with respect to pre-time management competency, intelligence and scientific temper.

## Discussion

### Effect of treatment on time

### Management competency

Instructional material on time management was found to significantly enhance time competency of students in comparison to traditional method when pre-time management competency, intelligence and scientific temper were taken as covariates. This finding has been supported by Desai (1966), Sharma (1966), Sie, Gujarat (1970b), Mehta (1973), Sethi (1976), Shitole (1976), Pandey (1980), Seshdri (1980), Jarial (1981), Shah (1981), Bhaskara (1982) And Sharma (1982) who developed instructional material in different subjects for facilitating achievement in school subjects, reading ability, concept understanding, creativity, etc. This might have been because students were free to read the instructional material at their own pace & as many time as they liked. The nature of instructional material was self-instructional. It was developed in simple Hindi language. The content was presented in logical sequence & examples were taken from daily life. To make the material enjoyable, cartoons were made and integrated with the content. On the other hand, the group treated through the traditional method was not given any information about the time management and was not brought in discussion during teaching. It indicates that normally students are never exposed to time management &

they learn about it in their own way through trial and error method. The present instructional material on time management can bridge this gap, and students can be trained in time management through the use of the instructional material developed in this study.

### Influence of discipline on time

### Management competency

Time management competency was found to be independent of discipline pre-time management competency, intelligence and scientific temper were taken as covariate. This might be because time management is not part of the syllabi. It is not even discussed formally in the class by the teachers of different subjects. Even the colleges do not organize a lecture on time management. In the nut sell the development of time management competency was never the focus and even the agenda of the colleges. This might have been the reason for the present finding.

### Influence of type of family on time

### Management competency

Students belonging to nuclear family were found to have better time management competency in comparison to students of joint family when both the groups were matched with respected to pre-time management competency, intelligence and scientific temper variables. In the nuclear family each member might be having the specific task to do. The time also might have been fixed. The parents might be giving the feedback about the time or might be reminding them about the time. They might have framed the time schedule. In nuclear



family it is possible to stick to the schedule. They also get opportunity to properly utilize the available resources. They cannot afford to waste the available resources. It is this training in the family that goes a long way in understanding the time management consequently time management competency might have been developed.

Influence of interaction between treatment

And discipline on time management competency

Irrespective of the nature of treatment, students belonging to science, arts and commerce disciplines were found to possess time management competency to the same level when groups were matched with respect to pre-time management competency, intelligence and scientific temper. It implies that the students studying different subjects could benefit equally from the developed instructional material on time management and traditional method. Instructional material on time management has many advantages over traditional method. Thus, students studying different subjects could benefit equally from instructional material on time management. They could improve their time management competency. That means nature of subjects studied by students does not come in the way of benefiting from the developed instructional material on time management.

Influence of interaction between treatment and

type of family on time management competency

Irrespective of the nature of treatment, students belonging joint family and nuclear family were found to possess time management competency to the same level when groups were matched with respect to pre-time management competency. The treatment was not designed so as to take into cognizance the type of family to which the students belong. Even in the classroom the students belong to different families but the teachers treat them equally. There are no methods of teaching which take into cognizance the type of family. Thus, the developed instructional material on time management can help students belong to different families in developing time management competency.

Influence of interaction between discipline and

type of family on time management competency

Irrespective of the nature of discipline, students belonging to joint family and nuclear family were found to possess time management competency to the same level when groups were matched with respect to pre-time management competency, intelligence and scientific temper. It shows that students belonging to nuclear family and joint family but studying different subjects were found have time management competency to the same extent. This may be because students studying different subjects might not have got tips or information about time management from their family members. It is observed that even the family members are equally ignorant about the time management





competency. This might be the reason for the present finding.

Influence of interaction among treatment,

discipline and type of family on time management competency

Time management competency was found to be independent of the interaction among treatment, discipline and type of family when pre-time management competency, intelligence and scientific temper were taken as covariates. It implies that students belonging to different families and studying different subjects could benefit equally from the developed instructional material on time management and traditional method. Instructional material on time management has many advantages over traditional method. Thus, any student irrespective of type of family and discipline could use instructional material on time management for improving time management competency. Thus, it caters to the need of heterogeneous group. The students belonging to different families and studying different subjects might have found the instructional material on time management quite useful and might have developed time management competency to the same extent.

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