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# Relations of Different Features in Time Management: Procrastination

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## ABSTRACT

Time is the most important resource for people. No matter which resource or background is compared, the time is imperative. People's productivity, and hence organizations' performance are heavily related to their time usage. Therefore, all people should have conscious awareness towards their time. Time, however, is not an easy concept to handle for leader or even understand it. It has many different faces towards people. The challenge is that chronological time, where the business and management are done, is not nearly easy to fit to human factors. Individuals' experiences towards time differentiates to one another and different situations are constantly changing the experience of individual. Learnt practices and personal traits are changing the persons' feelings towards time. This article aims to study how good time management practices, features of procrastination and balance in life are correlating and how they are related to each other's. Sample group was 108 students from Turku University of Applied Sciences. Responses were gathered with Chronos & Kairos research tool in 2014-2015, compositions for statistical analysis were done with Excel and closer statistical analysis was made by SPSS. Results show that there are significant correlations between time management practices, procrastination, and balance in life. Future research aspects and recommendations are also issued in this paper.

**Keywords:** Time management, Human factor, Procrastination, Organizational behavior

## INTRODUCTION

This study is continuing the series of studies regarding time and time management and human factor in them. Former studies have already found that people possess different time personalities and time's face towards people is situation related (Reunanen 2015a; 2015b). There also seems to be correlation and connection between time and innovation management (Reunanen, Windahl & Vanharanta 2016; Reunanen & Vanharanta 2018) and correlations between time management and organizational commitment (Reunanen & Einolander 2020). The purpose of this study is to deepen the understanding of human factor in time management and scrutinize the certain feature of procrastination in it.

One of the most important skills for everybody is the skill of managing oneself and for those who prevail in it Drucker (2005) promises that: "*Success in knowledge economy comes to those who know themselves-their strengths,*

*their values and how they best perform*". Drucker handles personal management skills and emphasizes consciousness awareness about oneself and observes that "*effective executives do not start with their tasks; they start with their time*". This way he underlines that time is the limiting factor (Drucker 1967 pp. 25–26).

In general, time is not an easy concept to master. Even that humans have learned different ways to sequence time, it's faces to people are different than these sequences. When thinking this, it should be remembered that time is a unique resource that cannot be stored, time is perishable, irreplaceable and has no substitute. Demand does not affect time and it has no price or marginal utility curve. And one thing above all, when talking about time in modern working life, it is always short of supply (Drucker 2005; Turnbull 2004). Time is usually be divided into two categories: subjective time and objective time (Harung 1998). Objective time is chronological time and subjective time is heavily relativistic and the speed of it is dependent on e.g. a person's way to utilize and sequence time, feeling, (ibid), a person's cultural background (Lewis 2010), situation, time pressure (Kobbeltvedt et al 2005) sleep deprivation (Kobbeltvedt et al 2005; Barnes et al 2011), personal traits (Berglas 2004) or planning personality (Buehler & Griffing 2003). All these are the examples of the factors which affect a person's experience of time. Its also found that balance between civil life and working is important factor of time and its management (Harung 1998; Turnbull 2004; Sabelis 2002; Johnson 2004). From that balance, especially rest is found to be crucial and if a person does not receive enough time for rest and sleep, it may lower self-control and the possibility to behave unethically will raise (Barnes et al 2011), and sleep-deprivation can be very harmful in time-pressured activities (Kobbeltvedt et al 2005). From four distinctive personal traits of time abuser's perfectionist, preemptive, people pleaser and procrastinator, the procrastinator is the worst (Berglas 2004), strengthened with idea of monkey in my back (Oncken & Wass 1999). Procrastinators are people who postpone everything and even undermine their own work. By postponing and undermining their work, they might find several reasons why the achievement or result of the work is not better, when the reasons are self-made or at least largely exaggerated. Procrastinators are people who will delay their starting and/or accomplishment to the last possible moment and start panicking in the situation. Interruptions by other tasks and unexpected crises also very often influencing procrastinators' work and lower their performance. Procrastinators are in fear of that they will not succeed well enough in their tasks. For this reason, there is always a handicap or scapegoat to be found in all situations. Even sincere praise after a successful task might sound that more and better work is needed in the ears of a procrastinator. Procrastination is probably the worst feature of "time burgling" (Berglas 2004).

When scrutinizing the stages of understanding time, the Jönsson's (2000) four stage approach could give good overview and background. Drucker (2005) describes his three-stage process time management model by dividing time management into three different processes: recording time, managing time, and consolidating discretionary time into bigger sections. Discretionary time would be the goal to achieve in time management.

The theoretical discussion was derived to a hypothesis (H1), (H2), (H3), and a research question (RQ1): (H1): There is a (negative) correlation between good time management practices and habits of procrastination (H2) There is a correlation between the good time management practices and balance in life (H3) There is a correlation between procrastination and balance in life (RQ1): If the any of these correlations exists, how can it be interpreted and what conclusions can be made?

## RESEARCH

### Initial Sample

Research was done by utilizing application called Chronos & Kairos (C&K) (Reunanen 2015; 2016), which main purpose is to reveal individuals' conscious awareness towards time and to give possibility for thorough research for peoples' differences when experiencing and managing time. C&K is part of Co-Evolute research tool. Research data collection was executed in 2014 – 2015 and consisted of 108 individual respondents answering to application. Respondents were students from Turku University of Applied Sciences. Students were mostly from engineering and business degree programs and represented full-time students and part-time (working adult) students. C&K uses Visual Analogic Scale (VAS) methodology. After answering to propositions with VAS, the fuzzy logic is used to process linguistic data in computational, numerical ways. In C&K fuzzy logic transforms all answers from respondents to integer between 0 and 1. Every respondent answered for every 168 propositions in two different cases: current status and target status. From there the creative tension i.e., proactive vision was calculated. Creative tension is difference between target status and current status and therefore points out respondent's magnitude and direction for development need. Since this tension is calculated by diminishing current status integer from target status integer, it could be to both directions, need to add or need to lessen that feature. Compositions for statistical analysis were done with Excel and closer statistical analysis was made by SPSS. Since the aim was to study human factor in time management from procrastinators point of view, the amount of analyzed propositions were narrowed to 16. The choosing was done so that all propositions which included matters of procrastination, time management or balance in life and which arithmetic mean of sample groups' creative tension was  $<-0,25$  or  $> 0,25$  were taken under scrutiny. There were 13 of those and these propositions and their creative tensions' means were:

- P1) I record my time usage (0,278)
- P2) I plan my time usage (0,2641)
- P3) I reserve time to working schedule for unexpected issues. (0,272)
- P4) I check afterwards how well I managed to follow my time usage plan (0,313)
- P5) I have too much unfinished tasks (-0,343)
- P6) I start to work on the eleventh moment. (-0,320)
- P7) My projects/tasks are accomplished later than scheduled (-0,252)

- P8) Small incomplete things disturbs me when bigger task should be started. E.g., before starting bigger tasks I want to organize my emails or archive shells. (-0,295)  
 P9) I fear that I don't manage my work well enough (-0,278)  
 P10) I sleep enough (0,277)  
 P11) I have enough time to family and/or friends (0,283)  
 P12) I can keep my holidays as I like (0,275)  
 P13) I am exhausted on my holidays (-0,271)  
 P14) I have my schedule filled efficiently (0,259)  
 P15) I have as much time as I need. (0,318)

From these propositions P1-P4 are related to good time management practices, P5-P9 are related to procrastination, P10-P13 are related to balance in life. P14 and P15 are interesting single point of view propositions since these are strongly related to satisfaction and effectiveness of person and also to persons understanding towards time and they were clearly over threshold of 0,25. Therefore, they were taken also to for deepen analysis.

### Analysis

Selected propositions were analyzed with SPSS Table 1 shows the correlations between propositions. All propositions had 108 samples and therefore there was 1728 individual datapoints in deeper analysis.

### RESULTS

As seen from the table all propositions which are related to good time management features (P1-P4) were correlating together with very good significance level  $p < 0,01$ . These results give good starting point for discussion of correlations between proposition groups. All the propositions related to the procrastination (P5-P9) showed correlation to each other's with good significance  $p < 0,01$  too. This also supports the reliable scrutinization of correlations between proposition groups. Again, the propositions group regarding balance in life (P10-P13) was showing correlations with same significance than others ( $p < 0,01$ ), with difference that P13 was correlating negatively to all others.

When looking the correlations between proposition groups the first thing what is clearly seen is that all propositions for good time management features are correlating negatively with all the propositions related to procrastination. Yet again the significance level is very good. All correlations significance level was  $p < 0,01$  except between P1 and P7 and between P3 and P9 which had  $p < 0,05$  significance. This result indicates also strong evidence. Hence, there was undeniable correlations found H1 was supported.

The results from correlations between good time management capabilities and balance in life are not as straightforward as former ones. P1 (I record my time usage) didn't correlate to any other than negatively with P13 (I'm exhausted on holidays). Even that there is negative correlation, there isn't direct evidence in former studies that there is causality between these two. The speculations could be made, regarding e.g., mediator variables, but this

**Table 1.** Pearson's correlations between propositions n = 108, single tailed.

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
P1	1	,482**	,230**	,485**	-,338**	-,336**	-,211*	-,423**	-,386**	0,150	0,135	0,128	-,198*	,459**	,370**
P2		1	,389**	,521**	-,368**	-,483**	-,365**	-,473**	-,336**	,162*	,189*	0,033	-,184*	,507**	,385**
P3			1	,281**	-,308**	-,369**	-,229**	-,311**	-,214*	,254**	,333**	,233**	-,178*	,179*	,292**
P4				1	-,348**	-,394**	-,439**	-,399**	-,344**	,294**	,179*	,254**	-,320**	,378**	,478**
P5					1	,509**	,565**	,456**	,392**	-,287**	-,288**	-,387**	,390**	-,324**	-,458**
P6						1	,539**	,482**	,313**	-,181*	-,0,103	-,0,104	,262**	-,353**	-,186*
P7							1	,416**	,276**	-,251**	-,248**	-,249**	,417**	-,408**	-,429**
P8								1	,433**	-,290**	-,201*	-,369**	,361**	-,316**	-,397**
P9									1	-,213*	-,282**	-,246**	,285**	-,212*	-,394**
P10										1	,374**	,418**	-,448**	,275**	,300**
P11											1	,416**	-,444**	0,158	,493**
P12												1	-,450**	0,047	,390**
P13													1	-,169*	-,458**
P14														1	,340**

\* p<.05; \*\* p<.01

result is left out for further analysis and to be explained in future. P2 and P12 didn't correlate either. This seems rather unexpected since it would have been more expected results that time planning and possibility to keep holiday as liked would have correlated. This opens a possibility for thinking that people who plan their time well, don't want to do that at holiday, but this is mere wild speculation and very prone to narrative fallacy, since there is not any evidence in this study to support that. P2 on the other hand correlates with P10, P11 and negatively with P13 with significance of  $p < 0,05$ . On top to that when looking that P3 and P4 also correlate well with P10-P13 for significance of  $p < 0,01$  except P3 with P13 and P4 with P11 which correlate by  $p < 0,05$  it shows that there are strong correlations between time planning features and balance in life. This result gives the answer that H2 was supported, and it raises need for further discussion.

When seeing that procrastination is correlating negatively with all propositions for balance in life, except P6 with P11 and P12, it seems that this should be taken under more focused investigation. Especially when P12 can be seen influenced by correlations with P13. The correlations between procrastination and balance in life is seen so that all procrastination habits are very significantly,  $p < 0,01$  correlating with P13 meaning that procrastination and being tired on holiday is something to look on more. Thus, the only proposition P11 is not correlating with directly or via another proposition. These correlations are giving the evidence that H3 was supported.

Significant correlations are also found for P14. It correlates positively with all propositions related to time management and negatively related to procrastination propositions, but it seems that there is no correlation between efficiently filled schedule and free time (P11 and P12). P14 also correlates negatively for being exhausted on holidays, which can be thought to be more evidence that this proposition is not affecting to free time. Since term efficient is double-edged sword, this needs more clarification. Proposition P15, kind of a positive master proposition for all situations Drucker's (1967 p. 31) suggestion, where people should to feel that "*we have all the time in the world*", seems to have significant positive correlations with time management, balance in life as well as efficient schedule features. It also correlates negatively with procrastination and exhausting work. This proposition seems to explain the much of situation how people feel they should develop in their situation. This indeed needs more attention and deeper clarification.

## CONCLUSIONS AND DISCUSSION

The aim for this paper was to clarify the understanding of human factor in time management and deepen the knowledge about features related to procrastination. The significant correlations showed that proposition groups, time management practices, procrastination and balance in life were well aligned and the proposition groups' inner correlations were clear and thus supported the existing literature and former studies. Also, the single point of view propositions was correlating well and gave possibility for better explanations for both, groups' inner correlations and correlations between groups.

As the good time management practices were correlating negatively with habits of procrastination this gives a possibility to further handling. It's clear that respondents have recognized that when they are trying to avoid and lessen the bad habits of procrastination the good way to do it could be enhanced good time management practices. This is very plausible conclusion, but it is too easy. There is evidence that even when time management behavior may have a beneficial effect on positive psychological features such as the perceived control of time and the actual performance will also benefit in the form of punctuality, awareness of time usage, staying on schedule and autonomy in time usage (Burt et al. 2010), the evidence towards enhanced performance is inconclusive and even negative outcomes were found in forms of job-induced and somatic tensions (Claessens et al. 2007), i.e. sometimes only false self-confidence is gained. Therefore, the actual change in performance should be studied when better time management practices are considered, not only the feeling. The extra hardness here is that even when everything would be done correctly and right, effective measures would be used, peoples' personal traits are very hard to change as said earlier, procrastination is one of the worst "*time burglars*" (Berglas 2004).

Keeping discussion above in mind and adding the scrutinization of the existing literature and the efficiently filled schedule proposition (P14), it opens the interesting paradox. It's shown that the efficiently filled schedule may be the indication of that false self-confidence. If efficiency is understood correctly, so that it means that the activity is accomplished so, that no more time is used than really is needed (Harung 1998), it may be good thing. But there are a lot of evidence, that efficient schedule is understood by hectic, maximized time utilization by packing every moment of the day with very intensive activities and coping excessive worktime by suppressing time from oneself, family, and friends (Turnbull 2004). Compression of time is also found phenomenon with meaning that person leaves things out and try to get to the essence of things (Sabelis 2002). These are not very long-lasting strategies for balance in life or long-lasting work performance. This research didn't find correlations between efficient schedule and balance in life, but there could be numerous reasons for that. The best explanation here is that the respondents have understood efficient schedule with right way. As there also was the significant correlation between time planning practices and balance in life, that supports the interpretation that efficient schedule is understood correctly.

When taking procrastination and balance in life under scrutiny the whole new approach is opened. When looking the literature and former results of this study it is quite clear that procrastination is not good for work performance. According to results of this study it seems that it's not good for balance in life either. Results show that procrastination have major negative effect on people's holidays (free time), both ways. It narrows the freedom to keep the holidays as wanted and effects to energy levels in holidays negatively. Support for these is not found on former literature, but they seem to be plausible, since the results also show that procrastinators have unfinished tasks and execution of work tasks take more time than expected. Procrastination also seems to affect the amount of sleep. These results are supporting the idea that procrastination have impact to holidays also. The result that procrastination is



also correlating negatively to balance in life through fear that person is not managing his/hers work. This is something which is found from literature too (Berglas 2004). From this perspective, procrastination can affect to changing jobs as, former study show that the balance of personal life and work is the most or second most important attribute of the job and that many will change their job if it improves the balance between work-time and self-time (Johnson 2004).

As the other single point of view proposition is well enough discussed earlier the last scrutinization should be placed to proposition P15. This suggests that: I have as much time as I need. This proposition correlates positively with good time management practices and balance in life and it is as correlating negatively with features of procrastination. It makes it so remarkably clearly, that there is a temptation to suggest that this proposition could be used in order found out a lot from peoples' time management, situation, and traits. This result supports the Drucker's statement that "*People have to feel that we have all the time in the world*" (Drucker 1967 p. 31) and observation that "*Effective executives do not start with their tasks, they start with their time*", is the underlining, that time is a limiting factor (Drucker 1967 pp. 25–26). Statement regarding to have all the time in the world, may seems peculiar when looking procrastinating. But when we turn over the idea that, as Berglas (2004) said: procrastination is probably the worst feature of "time burgling," it indeed means that if you get rid of it, you may have all the time in the world. When remembering that respondents pointed that proposition, I have all the time I need was one with the highest creative tensions. It had significant correlation with good time management practices and balance in life in all propositions. It had significant negative correlation with all propositions of indicated procrastination habits which also had very high creative tensions. We could come to conclusion that time management, procrastination, and quite idealistic thought that you can have all the time in the world, without jeopardizing your work – free-time balance, could be one of the most interesting results of this study. This idea could be promising direction to research further.

There are significant limitations found in this research. Sample group is not representing the working life as and all workers even when the gender ratio was quite equal. Sample group consisted only young people born after between 1990 and 1998 i.e., they were representing generation y or millennials. Respondents represented university students in degree programs in which is quite hard to get in. Last, but not least, cultural homogeneity. Respondents were only from Finland, Nordic, rich, free and democratic country which is prone to linear active approach for time (Lewis 2010). It would be very interesting to replicate this research in different cultures, professional maturity level respondents and different industries and see whether the results would be universal or to found differences from these.

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