Impact of birth order on procrastination among college students
in Eldoret town

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Abstract
The study sought to investigate the impact of birth order on procrastination among college students in Eldoret town. The study sought to achieve the following objectives: (1) to find out the prevalence of procrastination among college students in Eldoret town, (2) to find out the relationship between birth order on procrastination among college students in Eldoret town, (3) to investigate the relationship between age and procrastination among college students in Eldoret town and, (4) to investigate the relationship between gender and procrastination among college students in Eldoret town. The study adopted the ex post facto design. This single survey study purposively recruited 20 firstborns, 20 middle children, and 20 last-borns, from the KIM school of management, Eldoret campus. The sample comprised 30 male and 30 female respondents. Data was collected using a questionnaire. Hypothesis testing was done using the chi-square test. The findings showed that a total of 33 (55%) felt that birth order did affect their motivation for doing things while 27 (45%) felt that it did not affect them. Of the 28 who procrastinated, 21 said they always did so while 7 postponed sometimes. A total of 35 respondents indicated that they often gave up on a task whenever it got difficult while 25 (41.7%) opined that they never did so. Hypothesis testing result confirmed that there was a statistically significant association between procrastination and age of the respondents. Of the 28 respondents who procrastinated, 16 (57.1%) were female while 12 (42.9%) were males.

Key words: birth order, procrastination

The concept of procrastination and birth order
Birth order also known as the ordinal position is the rank of siblings by age. Being the firstborn, middle child, last-born, or only child may affect your behavior. According to Fiore (2006) procrastination is the practice of carrying out less urgent tasks in preference to more urgent ones, or doing more pleasurable things in place of less pleasurable ones, and thus putting off impending tasks to a later time, sometimes to the "last minute" before the deadline. The pleasure principle may be responsible for procrastination; one may prefer to avoid negative emotions, and to delay stressful tasks. The belief that one works best under pressure provides an additional incentive to the postponement of tasks. Some psychologists cite such behavior as a mechanism for coping with the anxiety associated with starting or completing any task or decision. Steel indicated in 2010 that anxiety is just as likely to get people to start working early as late and the focus should be impulsiveness. That is, anxiety will cause people to delay only if they are impulsive (Steel, 2010).

Schraw, Wadkins, and Olafson (2007) proposed three criteria for a behavior to be classified as academic procrastination: it must be counterproductive, needless, and delaying. Steel (2007) reviewed all previous attempts to define procrastination and in 2007 indicated it is "to voluntarily delay an intended course of action despite expecting to be worse off for the delay". Sabini & Silver argued that postponement and irrationality are the two key features of procrastination; putting a task off is not procrastination, they argue, if there are rational reasons for doing so.

Birth Order and Personality
According to McGuirk & Pettijohn (2008) the pioneer of birth order research, Alfred Adler, had theorized that each birth position has a set of personality traits associated with it. According to him, firstborns are always seen as leaders, high-achievers, ambitious, and conforming. The first borns attempt to please their parents via traditional ways, which are through responsible behaviors and high academic performance. The first born is only child for period of time and is initially used to being center of attention. Over time, he/she believes must gain and hold superiority over other children. For them, being right, controlling often important and they strive...
to keep or regain parents’ attention through conformity. Observations indicate that they may develop competent, responsible behavior or become very discouraged. If this fails, the first born may choose to misbehave. Paulhus, Trapnell & Chen (1999) observe that last-borns and only children are frequently viewed as the spoiled kid of the family. It is because both of these birth positions are the only focus of the family. However, unlike the only children, the later-born children, including the middle children and last-born children, are aware of the higher status of the firstborn, so they will seek alternative strategies to stand out from their siblings. Last borns behave like only child and expects others to do things, make decisions, takes responsibility. More often they feel smallest and weakest and may not be taken seriously by other siblings. Due to how they are treated or handled, they become boss of family in getting service from others and having their own way. The last born develops feelings of inferiority or becomes “speeder” and overtakes older siblings. In other cases, the last born remains “The Baby” of the family. Middle children, on the other hand, may experience difficulty finding a position of privilege and significance in the family because they never have the opportunity to monopolize parents’ attention (Adams 1972). Thus, they constantly fight to stay ahead of their younger siblings. The middle child of three is usually different from the middle child of a large family. The middle children of large families are often less competitive as parents don’t have as much time to give each child and so the children learn to cooperate to get what they want.

According to Paulhus, Trapnell & Chen (1999) a dethronement theory was proposed to explain birth order effects on personality development. The first born may respond to birth of second child by feeling unloved and neglected. Before the birth of the younger sibling, the eldest child had his or her parents’ complete attention but he or she was later dethroned by a newborn. As a consequence of dethronement, the child may struggle to regain parental attention. This would usually lead the firstborn to develop such characteristics as conscientious, conservative, independence and competence, which would later facilitate one’s academic attainment. Another theory that describes birth order effects on personality development is family-niches model (Sulloway, 1996). According to Sulloway (1996), children are motivated to solicit parental investment when they perceive differential parental investment within the family. They compete for parental investment by creating distinctive niches. Sulloway also hypothesized that firstborns are less agreeable as compared to later-born children because firstborns dominate the younger siblings to minimize the diversion of parental investment. In contrast, the younger siblings avoid confrontation with the firstborns to solicit parental investment, which in turn led them to be more agreeable.

Besides, Sulloway (1996) also suggested that firstborns correlate negatively with openness as compared to later-born children because openness is the factor that assists later-born children to create distinctive approaches to compete for parental investment. Furthermore, he found that firstborn are more conscientious than the later-born children because firstborns reflect their parents’ attitudes, beliefs, and personality characteristics whereas later-born children may develop attitudes, beliefs, and personality characteristics that are apart from the eldest sibling and parents. Therefore, Sulloway (1996) described that later-born children are born to rebel. In the past, studies that were carried out to examine the relationship between birth order and personality has generated inconsistent findings. Healey and Ellis (2007) who studied university sample (n= 161 sibling pairs) and older adults (n= 174 siblings pairs) reported that firstborns scored significantly higher on conscientiousness and lower in openness to experience than their second born siblings.

Moreover, Paulhus et al. (1999) had their participants to nominate the most achieving and conscientious sibling within their family and found that the firstborns were rated as more achieving and conscientious than later-born children. On the other hand, Jefferson, Herbst, and McCrae (1998) administered brief measures of neuroticism, extraversion, and openness to experience to 9964 participants and reported that self-report and spouse rating of personality dimensions were unrelated to birth order.

**Birth order and educational attainment**

Sullies (2010) intimated that negative behavior in school can have an adverse effect on the academic achievement potential of a child. In turn, this can alter all of the paths that a person will have presented to them throughout life, like quality of secondary education and job earning potential.
In regards to this area of educational efficacy, again studies show that higher sibling is negatively correlated with higher levels of success, and also firstborns consistently perform better than do later-borns in terms of academic adherence.

In recent years, this topic of educational accomplishment in relation to the role birth order might play has been a popular topic of research. Almost any angle possible has been taken to explain the consistent phenomenon seen, one example being that firstborns are more academically gifted than later-borns. Many of the studies have struggled with confounding factors that again can explain away significant results. An example of this being that families of lower socioeconomic status tend to have more children making them biased to later-borns (Downey, 2001).

With each subsequent birth the parents child care time goes up, in turn making their time used to earn money for the family at a job go down; adding to the economic stain (Gugl and Welling, 2010). Where it would seem that these later-borns are not as educationally astute as firstborns, the results may be better explained by a lack of access to resources like better schools or materials based in a lack of economic ability and not the child’s potential.

This said, studies that can manage to control for such issues still find that oldest children are more likely to be higher achieving than younger siblings in families. These finding are not unique to studies done in the United States either, but similar results have been seen in Great Britain and Korea (Cho, 2011).

All this data seems to point to an unequal distribution of the family’s resources and parental time, much like with behavior development. Both of these examples actually illustrate Charles Darwin’s principle of divergence, where in siblings will diversify themselves from the others in order to stand out and get a better share of the family’s supplies (Sulloway, 1996).

Younger siblings may choose to focus on other skills outside of academics as a means to gain parental attention and approval, leaving schooling as a shining point for the older sibling. Another explanation for the findings of the research is that as the oldest, firstborns are simply the first to need such articles as money for college, leaving less and less for the proximal siblings. Researchers do place a great deal of emphasis on the lack of achievement for later-borns as a result of less parental involvement and not something about the children’s genuine academic ability or disability.

According to Cho (2011) this kind of research is not concerned with determining how birth order affects the prevalence of learning disabilities, but rather looking at achievement within children of appropriate cognitive levels at their ages. Again, later-borns are biased to be part of larger families, making it harder to ensure that each child is receiving equal parental attention as it is split amongst more children and outside factors like jobs and spouses. The success of older children also gives parents a sense that they are doing a good, or at least sufficient, job at helping their children subsequently leading to a decline in the effort paid to the younger children who will be in more need of help.

In reality, that firstborn may be higher academically achieving because he or she has a more driven personality and is less likely to act out in school so attendance to classes is better, making the parental investment a small or not influential piece at all. With so many possibilities as to how to explain the impact birth order can have on educational adherence, more research must be done and is being done on the topic. Nevertheless, birth order most certainly appears to have a very real impact on the opportunities a child has to be academically successful, just as does on other areas of development.

The problem

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order on procrastination or postponement of academic tasks by learners yet tasks and assignments are part and parcel of academics that learners of different birth positions or order are exposed to. The study sought to investigate the Impact of birth order on procrastination among college students in Eldoret town

**Objectives and hypotheses**

The study sought to achieve the following objectives: (1) to find out the prevalence of procrastination among college students in Eldoret town, (2) to find out the relationship between birth order on procrastination among college students in Eldoret town, (3) to investigate the relationship between age and procrastination among college students in Eldoret town and, (4) to investigate the relationship between gender and procrastination among college students in Eldoret town.

The study tested the following two hypotheses:

HO1: there is no significant relationship between procrastination and the respondents’ birth position
HO2: there is no significant association between procrastination and the respondents’ age

**The study design**

The study adopted the ex post facto design. Ex post facto design is a non-experimental research technique in which preexisting groups are compared on some dependent variable; it is a type of study that can masquerade as a genuine experiment (Lammers and Badia, 2005).

**Study participants**

This single survey study purposively recruited 20 firstborns, 20 middle children, and 20 last-borns, from the KIM school of management, Eldoret campus. The sample comprised 30 male and 30 female respondents.

**Data collection Instruments**

Participants were required to fill in a consent form and demographic sheet before they proceed to respond to the questionnaire. The questionnaire comprised both open ended and close ended items. The instrument was used to transmit a set of questions to which the subject required to respond. They filled in their responses depending on their understanding of the perception of respondents on the guidance and counseling programme on pupil’s discipline.

**Study results**

The sample selection was such that 30 (50%) were male while 30 (50%) were female. Participants’ age ranged from 17 to 24 years where the mean age was 20.0 years, with a standard deviation of 1.85. All the students who participated in the study were taking management studies.

The study sought to find out what the respondents felt about whether their birth order and the manner of their upbringing affects their motivation for doing things including academic tasks and the responses were: a total of 33 (55%) felt that birth order did affect their motivation for doing things while 27 (45%) felt that it did not affect them. On further inquiry, it was evident that the first borns were motivated to take charge of things around them and they also felt that their siblings always looked up to them hence making them responsible. The last borns were hardly motivated because they grew up being pushed by others to act. Middle borns were inclined to take care of their own business.

From the study findings, it is apparent that those who procrastinated were 28 (46.7%) while those who did not procrastinate were 32 (53.3%). Out of the 28 who postponed things that they could do at that moment, 21 said they always did so while 7 postponed sometimes. Following up on that question, the study sought to find out whether or not the respondents sometimes wondered what the point was in doing some task and 31 (51.7%) agreed that they did ask themselves the question ‘what is the point of doing this task?’ while 29 (48.3%) never asked themselves that question.

The study sought to find out why the respondents would often postpone something because they did not know where to begin and 33 (55%) responded in the affirmative while 27 (45%) said they did not postpone because of that reason.

The students were asked if they thought that they worked best under pressure and 22 (36.7%) responded with a yes while 38 (63.3%) disagreed. Those who thought that they worked better under pressure were highly likely to procrastinate because procrastination would build the ‘desired’ pressure for working.
A total of 35 respondents indicated that they often gave up on a task whenever it got difficult while 25 (41.7%) opined that they never did so. Those who gave up attributed it to the fact that they were always helped by elder siblings and parents and that most of those tasks were too unrealistically difficult. Others cited lack of exposure in dealing with tasks of that nature.

The study sought to find out if the respondents felt that their early childhood experiences are responsible for how they handled or postponed tasks and 47 respondents said the experiences did influence how they handled the tasks while 13 (21.7%) felt that those experiences were not responsible for their manner of task handling and/or postponing. Of the 47 who responded in the affirmative, 16 were last borns (26.7%), 17 (31.6%) were first borns while 12 (20%) were middle borns. The last borns indicated that they were always helped by elder siblings and parents while the first borns having matured ‘faster’ were expected to take charge, demonstrate responsibility and a sense of direction to the younger siblings. This made the first borns less likely to procrastinate. The middle borns on the other hand were always left by family members to ‘fend’ for themselves and that may have taught them to be self-reliant or perish. They learnt that procrastinating was to their own detriment.

The study sought to find out whether there was any relationship between procrastination and the respondents’ birth position and the findings are presented on table 1.

<table>
<thead>
<tr>
<th>Procrastination/ Birth position</th>
<th>1st born</th>
<th>Middle born</th>
<th>Last born</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>17</td>
<td>11</td>
<td>4</td>
<td>32</td>
</tr>
<tr>
<td>Sometimes</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Always</td>
<td>1</td>
<td>5</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>60</td>
</tr>
</tbody>
</table>

The null hypothesis HO1: there is no significant relationship between procrastination and the respondents’ birth position was tested using the chi-square test. The calculated chi-square value was \( \chi^2 (4, 0.05) = 86.69, p < .05 \). Therefore, the null hypothesis was rejected and the study concluded that there is a statistically significant relationship between procrastination and the respondents’ birth position. An examination of the cross-tabulation above shows that most of those who procrastinated were last borns and a few middle borns. Procrastination among first borns was almost non-existent (1.7%).

**Age and procrastination**

The study established that younger students procrastinate more that older ones. Of the 28 that procrastinated, 21 were in the age bracket of 17-19 years (75%) while the rest (7) were older than 19 years. On testing the null hypothesis HO2: there is no significant association between procrastination and the respondents’ age, the study obtained the following chi-square results:

\( \chi^2 (4, 0.05) = 49.4, p < .05 \) on the basis of which the null hypothesis HO2 was rejected. This hypothesis testing result confirmed that there was a statistically significant association between procrastination and age of the respondents.

Of the 28 respondents who procrastinated, 16 (57.1%) were female while 12 (42.9%) were males. A clear indication that in this sample and population, by extension, slightly more females than males tend to procrastinate.

**Conclusions**

Based on the findings, the study concluded that prevalence of procrastination among the study college students was almost 50%. Majority of the respondents said that their early childhood experiences did influence how they handled the tasks which is a clear indication that considering the results of hypothesis testing indicated that there is a statistically significant relationship between procrastination and the respondents’ birth position with most of those who procrastinated being last borns and a few middle borns. Procrastination among first borns was almost non-existent (1.7%). Therefore the study concluded that birth order does affect one’s tendency to procrastinate.

On the relationship between age and procrastination, the study concluded that younger students tend to procrastinate more that older ones. For instance, of the 28 that procrastinated, 21 were in the age bracket of 17-19 years. Again, based on the findings, it was apparent that slightly more females than males tend to procrastinate.
References
Gugl and Welling (2010)