

Relationship Between Self-Control and Behaviour Modification Among Secondary School Students in Kenya

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Abstract The study investigated the relationship between Vicarious Experience and Delinquent Behaviour Modification among Secondary School Students. Concurrent Triangulation design was used. The target population was made up of 3,740 students, 26 school counsellors and 26 deputy principals from the twenty six (26) secondary schools. The Brief Self-control Scale and Behavior Modification Questionnaire were used to collect quantitative data while interviews and Focus Group Discussions were used to obtain qualitative data. The questionnaires were subjected to the scrutiny of the supervisors to ensure expert content validity and their recommendations used to finally formulate instruments with the ability to obtain the expected relevant data. Reliability results revealed that all the sub-scales reached the required level of internal consistency of reliability, with the Cronbach's alpha values ranging from a low of 0.701. There was statistically significant positive correlation between self-control and behaviour modification among secondary school students ($n=344$; $r = .276$; $p<.05$). The level of self-control is a significant predictor of behaviour modification among the secondary school students, $F(1, 342) = 28.267$, $p=.000 <.05$; Adjusted $R^2=.074$. Therefore, it was concluded that there is statistically significant influence of self-control on behaviour modification among the secondary school students. It is recommended that there is need for training of teacher counsellors on enhancement of self control among students.

Keywords Relationship, Vicarious Experience, Delinquency, Behaviour Modification, Secondary School, Students

1. Introduction

Behavior modification is the use of basic learning techniques, such as conditioning, biofeedback, assertiveness training, positive or negative reinforcement, hypnosis, or aversion therapy, to change unwanted individual or group behavior. A technique, typically based on functional assessment, used to reinforce adaptive behaviors while diminishing or extinguishing maladaptive behaviors (Kolakowsky-Hayner, 2011). Behavior modification is a type of behavior therapy. B. F. Skinner demonstrated that behavior could be shaped through reinforcement and/or punishment. Skinner noted that a reinforcer is a consequence that increases the likelihood of behavior to recur, while punishment is a consequence that decreases the chance. Positive and negative are used in mathematical terms. Positive indicates that something is added, and negative indicates something is subtracted or taken away. Fantini *et al* (2019) add that the goal of behaviour modification is to

reduce or eliminate undesirable behaviours and teach or increase acceptable behaviours. This is accomplished through the use of behavioural techniques and strategies such as systematic desensitization, modelling, reinforcement and aversive conditioning.

Self-control can, according to this perspective, be defined as the mechanism that allows for inhibiting or overriding impulses coming from the hot system, allowing precedence of the cold system (Gillebaart and De Ridder, 2017). A related model of self-control is the strength model of self-control (Muraven and Baumeister, 2000). The strength model is one of the most prominent, heavily debated models of self-control, and refers to self-control as an act of self-control by which the self alters its own behavioral patterns so as to prevent or inhibit its dominant response (Muraven and Baumeister, 2000). Self-control has also been defined as the ability to delay immediate gratification of a smaller reward for a larger reward later in time (Kirby and Herrnstein, 1995). self-control refers to the individuals' ability to overcome or change internal reactions, suppress impulses, and interrupt impulsive behavior response trends, such as changing and adjusting behaviors, thoughts, emotions, and habituation (Li & Zhang, 2011). The deliberative process in which trait self-control confers increased motivation to engage in goal-directed behavior, and greater capacity to actively monitor and resolve cues to

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impulsive behaviors, and an implicit process in which individuals are biased toward control-related cues and away from cues to impulse related behaviors. Theory on self-control suggests that trait self-control reflects individuals' capacity for impulse suppression and regulation of action over time (Paschke et al., 2016), and their ability to monitor and attend to cues to engage in goal-directed behaviors, and disregard or manage cues for behaviors that may derail the goal-directed actions (Baldwin, Finley, Garrison, Crowell, & Schmeichel, 2018).

According to Gottfredson and Travis (1990), individuals lacking in self-control are insensitive to others and are risk-taking, and more likely to experience problems in social relationships, such as marriage, they are more likely to use drugs and to abuse alcohol, and they are more likely not to wear a seat belt and to get into automobile accidents. Levesque (2011) reiterate that deficiencies in self-control play an important role in psychopathology, and it tends to be the centerpiece of research conducted by other names, such as delay of gratification, self-regulation, impulsivity, and self-discipline. These terms help highlight the centrality of self-control to healthy development, such as impulsivity and its place in impulse control problems, conduct disorders, and addictions. It is difficult to overestimate the significance of self-control in adolescent development.

Literature Review

Previous studies have been carried out between self control and behaviour change. Borushok (2014) in a study examined the relationship between trait self-control, weight loss and various health behaviors commonly associated with successful weight loss. The results showed a relationship between baseline trait self-control and baseline body fat percentage. Cochran, Aleksa and Chamlin (2006) used a sample of college students to reexamine this perspective. They showed that capacity for self-control and desire for self-control has independent effects on academic dishonesty. Tittle and Botchkovar (2005) showed that individuals may be able to perceive some level of control in their behavior through the consequences of their actions. Kuhn (2013) study tested dual-process decision-making models as predictors of between-person and within-person variation in risk-taking behaviour. whereas self-control was linked to lower levels of risk-taking because of lower levels of behavioral intentions. Aart, Terrie, Christian, Steglich, Dijkstra and Wilma (2015) The main findings indicate that personal low self-control and friends' externalizing behaviors both predict early adolescents' increasing externalizing behaviors, but they do so independently. Morutwa and Plattner (2014) explored the relationship between self-control and alcohol consumption among students at the University of Botswana. Participants who reported not drinking alcohol at all (55.6%) scored significantly higher in self-control. For those participants who reported drinking alcohol (44.4%), total self-control scores correlated moderately and inversely with alcohol consumption per week. Ferrari, Stevens, and Jason, (2009)

study examined the relationships between self-regulation and abstinence maintenance among adults in recovery. In addition, a factor analysis of self-regulation scores resulted in some differentiation between general self-discipline and impulsivity in self-control related to addiction.

Tangney, Baumeister, and Angie (2008) reported that Low self-control is a significant risk factor for a broad range of personal and interpersonal problems. The failure of these analyses to yield significant improvements in prediction suggests that self-control is beneficial and adaptive in a linear fashion. Nwagu, Enebechi, and Odo, (2018) study revealed that the students' level of self-control was a little less than the recommended level. Judistira and Wijaya (2018) showed that only self-control could predict academic achievement. Mohammad Sadegh Shirinkam et al (2016) study was conducted on 395 female and male university students of SardarJangal University, Rasht, Iran. In addition, coefficient β is negative which indicate an inverse relation between self-control and internet addiction; increase in self-control would decrease internet addiction ($p < .002$). Williams and French (2011) estimated the association between specific intervention techniques used in physical activity interventions and change obtained in both self-efficacy and physical activity behaviour. 'Relapse prevention' and 'setting graded tasks' were associated with significantly lower self-efficacy and physical activity levels. Rawn and Vohs (2011) argue that many of the behaviors that are typically coded as failures of self-control like smoking cigarettes can be understood as utilizing high levels of self-control. Rawn and Vohs focus on smoking, heavy drinking, binge eating, self-sabotaging intellectual performance, drug use, extreme violence, and consensual unwanted sex. Keinan and Kivetz (2011) show that people with high scores on a "productivity orientation measure" struggle to "take a break from self-evaluation" and are prone to experience "self-control regret," that is, regret over lost opportunities to enjoy oneself. Guan and He (2018) explored how state self-control influences the intertemporal decisions made by individuals with high and low trait self-control. Throughout the experimental stages, the heart rate variability (HRV) of participants with high trait self-control was significantly higher than that of participants with low trait self-control, indicating that individuals with high trait self-control may have stronger and more stable self-control abilities. Gillebaart and Adriaanse, (2017) demonstrated that trait self-control predicted exercise behavior. Mediation analysis revealed that the association between self-control and exercise was mediated by stronger exercise habits. Job et al., (2010) demonstrated that individuals who believe that self-control is not a fixed or limited capacity, and can be incrementally improved or applied flexibly, have better self-control capacity, and appear not to suffer as greatly from the deleterious effects of availability of self-control resources. Gillebaart and De Ridder (2015) suggest, this may be because adaptive habits allow people with higher trait self-control to go about their lives in a way that allows them to routinely avoid problematic situations, and make the

“right” choices in line with their long-term goals. Habits as an underlying process in trait self-control may therefore explain why people high in trait self-control are successful in achieving their long-term goals.

De Ridder and Gillebaart (2017) suggest that having high self-control is associated with a better ability to initiate goal pursuit and engage in goal-directed behaviour. In other words, those with high self-control are better able to set goals, act in ways that will help achieve these goals, and experience pleasure from doing so. Furthermore, those high in self-control seem better able to set adaptive routines in pursuit of long-term goals, such that behaviour is automated away from temptations or potential self-control conflicts. Koning, Verdurmen, Engels, van den Eijnden, and Vollebergh (2012) investigated whether scores on the Self-Control Scale moderated the effect of adolescent skills training, parent skills training or a combined intervention on the onset of weekly drinking and heavy weekly drinking in a sample of Dutch adolescents. The combined intervention was effective in delaying the onset of weekly drinking in adolescents with low self-control. No such effect was found for the onset of heavy weekly drinking. No effects were found for the other intervention conditions. Daly, Delaney, and Baumeister (2015) found that a decline in heavy smoking following a national workplace smoking ban and a 20% tax increase on cigarettes in the Netherlands was only evident amongst those with low trait self-control, and not those with high self-control. Rising and Bol (2017) examined whether self-control moderated the impact of menus adapted to show calorie information on the selection of a range of salads and beverages. Whilst no moderation by self-control was found, conditional effects indicated that calorie information influenced selection of lower calorie salads only amongst participants with low impulsivity and high restraint (two subscales of the Self-Control Scale). Junger and Van Kampen (2010) found that people with high self-control report engaging in exercise more often than those with less self-control. For many people, dispositional self-control seems to also be an important tool for regulating eating. Individuals scoring high in dispositional self-control are more likely than those lower in self-control to report healthy dietary practices such as eating a regular breakfast and avoiding unhealthy sweets. Wills et al. (2007) conceptually replicated the effect of self-control on diet and exercise behavior in a large, multiethnic sample of high school students. The only evidence we could find suggesting that self-control related specifically to changes in weight involved weight gain rather than loss.

From the reviewed study, very scanty information was available on behavior modification among students in secondary schools. In addition, most reviewed studies have been either quantitative or qualitative in nature, but the present study adopted a mixed methods design. In Rongo Sub-county of Kenya, there are several students who are currently undergoing counselling with the aim of addressing

delinquent behavior issues. The delinquent behavior issues range from stealing, aggression, fighting, sneaking out of school, substance abuse, lateness in attending lessons, lesson missing, use of abusive language on others, disrespect to teachers and many others. Thus, the study investigated the relationship between Vicarious Experience and Delinquent Behaviour Modification among Secondary School Students.

2. Research Methodology

Research Design and participants

The Concurrent Triangulation design was used. Triangulation refers to a combination of methodologies in a study of the same phenomenon (Rothbauer, 2008). In this design therefore, both quantitative and qualitative data were collected and analyzed at the same time of the research study. The researcher therefore gave equal priority to both components (Murdin, 2009). The target population was made up of 3,740 Rongo Sub-County students, their school counsellors twenty six (26) and twenty six (26) deputy principals from the twenty six (26) secondary schools.

Research tools

The Brief Self-control Scale was used to collect data on self-control among students. The response scales was in Likert format such as Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D) and Strongly Disagree (SD). Behavior Modification Questionnaire for Students Was also used to obtain data on behavior change among students. These were rated using the scale of Strongly Disagree (SD), Disagree (D), Unsure (U), Agree (A) and Strongly Agree (SA). The questionnaires were subjected to the scrutiny of the supervisors to ensure expert content validity and their recommendations used to finally formulate instruments with the ability to obtain the expected relevant data. Reliability results revealed that all the sub-scales reached the required level of internal consistency of reliability, with the Cronbach's alpha values of 0.701 (self-control questionnaire).

Data collection procedures

The Data was collected after obtaining permission from National Commission for Science Technology and Innovation - NACOSTI through the University's School of Post Graduate letter of introduction. Thereafter, the researcher obtained permission from the principals of the sampled secondary schools. The questionnaires were issued to the students on prearranged days as the best way to ensure optimum cooperation, participation and high students' response. The questionnaires took an average of 45 minutes to complete while Interviews and Focus Group Discussions took 30-45 minutes to undertake.

Data analysis

The methods of inquiry employed were interviews and

questionnaires. The data was analyzed using descriptive statistics and Bivariate analyses using simple cross-tabulations. Quantitative data was analyzed using frequency tables, descriptive statistics (frequency distribution and descriptive statistics such as percentages, means, and standard deviations). This data was got mainly from the teacher counsellors' and deputy principals' interview schedule. The Pearson correlation while qualitative data analysis was carried out through thematic frame work. In exploring the views of the students on their self-control, a Likert scaled itemed questionnaire was used. The items of the questionnaire were indicators of self-control among secondary school students. The responses were scored using a five point scale ranging from strongly disagree (1) to strongly agree (5). The scores were averaged to measure the respondents' attitude on their level of self-control. The student behaviour modification was interpreted from the summation of their characteristics as exhibited in indicators of behaviour after going through counseling services. The sampled students were provided with questionnaires with indicators of behaviour modification and were asked to rate their behaviour in regards to these characteristic.

3. Results

3.1. Questionnaire Return Rate

Information on return rate of questionnaires was obtained. Table 1, which shows the summary of return rate of questionnaires from the student respondents, reveals that the questionnaires were adequate for the study.

Table 1. Questionnaire Return Rate

Respondents	Questionnaires administered	Questionnaires returned	Return rate (%)
Students	374	344	92.0

Source: Survey data (2018)

3.2. Results on Relationship between Self-Control and Behaviour Modification among Secondary School Students

The hypothesis was stated as follows:

H₀₁: *There is no statistically significant relationship between self-control and behaviour modification among secondary school students in Rongo Sub-County.*

In order to test the null hypothesis, a Pearson Product Moment Correlation Coefficient was computed with scores on students' self-control as independent variable and behaviour modification as dependent variable. The scores of independent variable (students' self-control) was computed from frequencies of responses by computing mean responses per respondents. Mean response across a set of questions of Likert scale responses in each item was computed to create an approximately continuous variable, within an open interval of 1 to 5, that is suitable for the use parametric

methods, as explained by Johnson & Creech (1983) and Sullivan & Artino (2013). This was done after reversing the negatively worded statements, where high scale ratings implied high perceived students' self-control. Equally, behaviour modification was computed in a similar manner from the student responses on its indicators. The significant level (p-value) was set at .05, where, if the p-value is less than 0.05, the null hypothesis would be rejected and conclusion reached that a significant difference exist. However, if the p-value is greater than 0.05, it would be concluded that a significant difference does not exist. Table 2 shows the SPSS output correlation analysis results.

Table 2. Relationship between Self-Control and Behaviour Modification

		Self-Control	Behaviour Modification
Self-Control	Pearson Correlation	1	.276**
	Sig. (2-tailed)		.000
	N	344	344
Behaviour Modification	Pearson Correlation	.276**	1
	Sig. (2-tailed)	.000	
	N	344	344

** . Correlation is significant at the 0.01 level (2-tailed).

From Table 2, it is evident that there is a statistically significant positive correlation between self-control and behaviour modification among secondary school students (n=344; r = .276; p<.05). Since the p-value = 0.000 which is far less than 0.05 was established, the null hypothesis was rejected. Therefore, it was concluded that there is statistically significant positive relationship between self-control and behaviour modification among secondary school students in Rongo Sub-County, with high level self-control and associated to better behaviour modification among secondary school students and vice-versa.

However, to estimate the level of influence of student self-control on behaviour modification among secondary school students, a coefficient of determination was computed using of regression analysis and the result was as shown in Table 3.

Table 3. Model Summary on Regression Analysis of Self-Control on Behaviour Modification among Secondary School Students

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.276 ^a	.076	.074	.29379

a. Predictors: (Constant), Self-Control

The model summary reveals that students' level of self-control accounted for 7.4% (Adjusted R² =.74) of the variation in their behaviour modification. This finding indicates that variation in the students' self-control explains about 7% of the variability in behaviour modification among the secondary school students. Although, it is a small influence its impact is significant. Table 4 shows the coefficients values of regression model of the influence of self-control on behaviour modification.

Table 4. Coefficients- Influence of Self-Control on Behaviour Modification among Secondary School Students

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	2.653	.100		26.557	.000	2.457	2.850
Self-Control	.178	.034	.276	5.317	.000	.112	.244

a. Dependent Variable: Behaviour Modification

$$Y = \alpha + \beta x + \epsilon$$

$$\text{Behaviour Modification} = 2.653 + .178x + \text{error term.}$$

From the model it is evident that the slope coefficient for student self-control was 0.178 (B=.178), implying that student behaviour modification improves by this units for each one unit improvement in the level of self-control among the secondary school students. Similarly, an improvement in self-control by one standard deviation results to improvement of behaviour modification by .276 standard deviations, as indicated by standardized beta coefficient of 2.76. However, to investigate whether the level of student's self-control is a significant predictor to their behaviour modification, Analysis of Variance was conducted, in line with the recommendation by Tabachnick & Fidell (2001), as shown in Table 5.

Table 5. ANOVA-Influence of Self-Control on Behaviour Modification among Secondary School Students

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2.440	1	2.440	28.267	.000 ^b
Residual	29.520	342	.086		
Total	31.960	343			

a. Dependent Variable: Behaviour Modification

b. Predictors: (Constant), Self-Control

From the ANOVA output, there is enough evidence to conclude that the slope of the population regression line is not zero, meaning the level of self-control is a significant predictor of behaviour modification among the secondary school students, $F(1, 342) = 28.267$, $p = .000 < .05$; Adjusted $R^2 = .074$. Therefore, it was concluded that there is statistically significant influence of self-control on behaviour modification among the secondary school students. This suggests that secondary school student with high level self-control is likely to exhibit high behaviour modification and vice-versa.

From qualitative data, the main themes emerged through thematic narratives by participants who were involved in the interviews and focus group discussions. Data was collected from deputy principals, teacher counsellors and students who had undergone guidance and counselling. The participants shared varied views related to the current study in the interviews and the focus group discussions held with the teacher counsellors and deputy principals as well as the students consecutively. These were put together and giving data that formed the qualitative results presented in this chapter. By using excerpts from interviews, the descriptions

of the meanings and interpretations given to their experiences with the phenomenon were able to be made in a way that it was almost a reflection of the participants' views (Leberman, 2015). The themes on the relationship between self-control and behavior modification of secondary school students included thinking before acting, moderating reactions (check overreactions, element of restraint), seeking for advice to solve issues, behaving better than before counselling, and making own decisions.

Thinking before acting

Thinking before acting is said to be the way for one who has mastery of self-control (DeWall, 2014). This acting after thinking, also referred to as premeditation, was said to be a hallmark of those students who had positively gone through guidance and counselling sessions.

Results from interview with teacher counsellors revealed that some students who had undergone counselling acted after giving thought to the possible consequences of their actions. A representative statement is hereby quoted:

‘These students who have gone through guidance and counselling in classes I teach are able to control themselves and are not badly behaved anymore’ (TC 1).

The deputy principals' responses reveal that self-control positively relates with the behavior modification of secondary school students leading to not being influenced by peers. These students think about their actions, moves and reactions. These students may even end up being role models in their new-found positive behaviour standing by what they are acting upon despite opposition from around them. One deputy, reacting to this questionnaire item, is quoted thus:

‘The students who have gone through our guidance and counselling services are no longer influenced by their former bad groupings. Instead they positively influence some of their former bad colleagues to be better students. We find them to be of great help when it comes to discipline in our school’ (DP 6).

Similar views were expressed by students in a focus group discussion where they mentioned that students who have been guided and counselled did not do what most other students were doing but made their own decisions. A representative statement is hereby quoted:

“Students who have been guided and counselled change in the way they relate with their former friends who have not been to the service in our school” (FGD 2A).

Moderating reactions

Teacher counsellors postulated that delinquent students who were initially getting into issue because of overreacting behaved more positively after going through guidance and counselling sessions. These students were now slow to react and when they did, it was one that would not put them in problems with their fellow students and even other members of the school community. A teacher counsellor put it this way:

“They are able to think before reacting negatively. They can moderate their reactions. It checks overreaction. Leads them to seek for advice to help them solve their issues” (TC 2).

These students are further said to have an element of restraint. This is the case with students who used to get into issues because of their high tempers. They are now better behaved as they keep off rush reactions. They are able to hold themselves as a result of the guidance and counselling techniques of keeping themselves in check.

The results from the interview of the deputies gave control of impulses to steal, fight back those who fight them. These students end up relating better with their colleagues, a behavior they were not having before the guidance and counselling sessions. The quoted response is thus:

“It improves their behavior because they are able to control their impulses like the need to steal for those who were being accused of such, fighting tendencies for those who could not resist this temptation and drug abuse for those who were already in this” (DP 6).

There was the response that these initially delinquent students who have undergone guidance and counselling do make their own decisions. In most cases these were students who were initially making decisions based on group psychology which were negative. With this change they are now making own decisions which are reported to be positive. The teacher counsellor noted that:

“These students do not do what other students are doing rather they make decisions on what they want to do by themselves” (TC 2).

The focused group discussions’ related input to moderation had a member of one group saying that these students are changed in terms of better control of their tempers. This ties well with what is already noted about those who were getting into problems because of their uncontrolled temper flare ups. This input was quoted as:

“It assists one in controlling his/her temper towards a certain condition which might involve outbreak of quarrel or a kind of conflict” (FGD 1C)

Own decision making

The students who had problems related to group thinking

as well as group decision-making have been observed to make use of their own thought processes and end up with own decision-making after guidance and counselling. These students take greater responsibility for their actions and reactions. These more often than not help them with better behavior in school and even class. A teacher counsellor had this to say:

“The student may not do what the others are doing but have an own decision: self-decision on issues involving him” (TC 2).

The deputy principals also had a similar response. They had mention of the guided and counselled not influenced by peers. The influence from peers in school is always negative making it a loathed behavior by school administration. It does lead to bad behavior and any change that can make a student to keep off it would be appreciated. The deputy who brought in this noted that:

“Boys with problems are sometimes those who lack self-control. These are influenced by others to engage in bad behavior. They are often helped, through guidance to be able to rely on themselves for decision making rather than the bad boys” (DP 6).

In the focus group discussion a participant said that out of counselling, he is able to make own decisions. This may have been a student who initially had problems in making own and therefore relying on others’ decisions. This student associated this with development of good character in him. He put it thus:

“It brings a good character out of me hence guides me with my assertiveness and decision-making” (FGD 7B).

This means that the student is perceiving a behavior modification in him out of the guidance and counselling session.

4. Discussion

The study reported that there was statistically significant positive correlation between self-control and behaviour modification among secondary school students ($n=344$; $r = .276$; $p < .05$). The model summary reveals that students’ level of self-control accounted for 7.4% (Adjusted $R^2 = .74$) of the variation in their behaviour modification. This finding indicates that variation in the students’ self-control explains about 7% of the variability in behaviour modification among the secondary school students. From the model it is evident that the slope coefficient for student self-control was 0.178 ($B = .178$), implying that student behaviour modification improves by this units for each one unit improvement in the level of self-control among the secondary school students. Borushok (2014) reported a relationship between baseline trait self-control and baseline body fat percentage. Cochran, Aleksa and Chamlin (2006) showed that capacity for self-control and desire for self-control has independent effects on academic dishonesty. However, Tittle and

Botchkovar (2005) showed that individuals may be able to perceive some level of control in their behavior through the consequences of their actions. Kuhn (2013) reported that self-control was linked to lower levels of risk-taking because of lower levels of behavioral intentions. Aart, Terrie, Christian, Steglich, Dijkstra and Wilma (2015) indicate that personal low self-control and friends' externalizing behaviors both predict early adolescents' increasing externalizing behaviors, but they do so independently. Morutwa and Plattner (2014) reported that the participants who reported not drinking alcohol at all (55.6%) scored significantly higher in self-control. For those participants who reported drinking alcohol (44.4%), total self-control scores correlated moderately and inversely with alcohol consumption per week. Junger and Van Kampen (2010) have recently found that people with high self-control report engaging in exercise more often than those with less self-control. For many people, dispositional self-control seems to also be an important tool for regulating eating. Individuals scoring high in dispositional self-control are more likely than those lower in self-control to report healthy dietary practices such as eating a regular breakfast and avoiding unhealthy sweets.

From qualitative data, the main themes emerged through thematic narratives by participants who were involved in the interviews and focus group discussions. The themes on the relationship between self-control and behavior modification of secondary school students included thinking before acting, moderating reactions (check overreactions, element of restraint), seeking for advice to solve issues, behaving better than before counselling, and making own decisions. Rawn and Vohs (2011) argue that many of the behaviors that are typically coded as failures of self-control—like smoking cigarettes can be understood as utilizing high levels of self-control. Keinan and Kivetz (2011) show that people with high scores on a “productivity orientation measure” struggle to “take a break from self-evaluation” and are prone to experience “self-control regret,” that is, regret over lost opportunities to enjoy oneself. Gillebaart and Adriaanse, (2017) revealed that the association between self-control and exercise was mediated by stronger exercise habits. Job et al., (2010) add that researchers have demonstrated that individuals who believe that self-control is not a fixed or limited capacity, and can be incrementally improved or applied flexibly, have better self-control capacity, and appear not to suffer as greatly from the deleterious effects of availability of self-control resources. De Ridder and Gillebaart (2017) suggest that having high self-control is associated with a better ability to initiate goal pursuit and engage in goal-directed behaviour. In other words, those with high self-control are better able to set goals, act in ways that will help achieve these goals, and experience pleasure from doing so. Furthermore, those high in self-control seem better able to set adaptive routines in pursuit of long-term goals, such that behaviour is automated away from temptations or potential self-control conflicts.

5. Conclusions & Recommendations

From the study findings, it is concluded that there is statistically significant positive relationship between self-control and behaviour modification among secondary school students in Rongo Sub-County, with high level self-control and associated to better behaviour modification among secondary school students. the level of self-control is a significant predictor of behaviour modification among the secondary school students. there is statistically significant influence of self-control on behaviour modification among the secondary school students. This suggests that secondary school student with high level self-control is likely to exhibit high behaviour modification. The themes on the relationship between self-control and behavior modification of secondary school students included thinking before acting, moderating reactions seeking for advice to solve issues, behaving better than before counselling, and making own decisions. From the study findings, it is recommended that there is need for training of teacher counsellors on enhancement of self control among students.

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