

## Research Article

# Effectiveness of School Administration's Strategies for Protecting Children from Neglect Abuse in Public Secondary Schools in the Kilimanjaro Region, Tanzania

Felix Goldman <sup>1,\*</sup> <sup>1</sup> Tumaini University Makumira, Tanzania

\* Correspondence: goldmanfelix0@gmail.com

<https://doi.org/10.59652/jetm.v3i2.478>

**Abstract:** This study explored the effectiveness of strategies used by school administrations in the Kilimanjaro region, Tanzania, to protect children from neglect and abuse in public secondary schools. The research, guided by Bertalanffy's systems theory, employed a convergent mixed-methods design with 427 participants, using both quantitative (questionnaires) and qualitative (interviews) data. The findings revealed that neglect significantly hinders students' academic and social development. To address this, the study suggested establishing anti-neglect clubs where students receive teacher guidance and implementing a forgiveness education program to foster empathy, conflict resolution, and emotional awareness. The study also highlighted the need for regular evaluations of protective strategies. It found no significant differences in the effectiveness of these strategies based on teachers' years of experience. The study recommended that the Ministry of Education strengthen the implementation and monitoring of child protection strategies and provide in-service training for education officials and school staff. Additionally, teacher education programs should prioritize child protection to better prepare future educators.

**Keywords:** effectiveness Strategies; school administration; neglect abuse

## 1. Introduction

Following the adoption of the United Nations Convention on the Rights of the Child in 1989 (UNICEF, 1989) and the African Charter on the Rights and Welfare of the Child (ACRWC) in 1990 (Organization of African Unity, 1990), notable strides have been made toward integrating child rights into development agendas at global, continental, and national levels. The ACRWC emphasizes that all children must be protected from neglect exploitation and work that may pose risks to their physical, emotional, spiritual, moral, or social development (ACRWC, 1990, Article 15[1]). Similarly, the UNCRC guarantees protection from neglect, and abuse (Articles 19, 34, and 35).

Despite these frameworks, protecting children especially in school settings remains a shared responsibility extending beyond social services. Due to growing demands on child protection systems, social workers are often relegated to reactive roles, limiting the scope of early interventions (Aurino & Giunti, 2022). Such early interventions are vital for reducing both the long-term effects of neglect and the costs of crisis responses (Aurino & Giunti, 2022; McFarlane et al., 2002). Educators and other frontline professionals are well-positioned to identify early signs of neglect and respond collaboratively.

However, many children still face neglect abuse, sometimes compounded by discrimination or conflict with the law, where they are often misclassified as offenders rather than victims. This is worsened by the fragmented nature of current school-based child protection approaches, which often fail to address the systemic nature of these issues. School administrations must therefore acknowledge that effective protection strategies require clearly defined structures, functions, and capacities, as highlighted by UNESCO (2023).

Although a few studies in the Kilimanjaro region have documented incidents of school-based abuse, there remains a significant gap in practical and theoretical understanding of effective interventions. Brunswick (1952) warned that interventions lacking a systems-level

Received: April 7, 2025

Accepted: April 15, 2025

Published: April 30, 2025



**Copyright:** © 2022 by the authors.  
Submitted for open access publication  
under the terms and conditions of the  
Creative Commons Attribution (CC BY)  
license

(<https://creativecommons.org/licenses/by/4.0/>).

perspective risk being ineffective. Consequently, this study adopts a systems theory framework to assess how school administrations in public secondary schools in Kilimanjaro implement and manage child protection strategies. Its importance stems from the fact that schools serve as a primary environment in children's formative years, where protection from neglect and abuse must be a priority.

This study was guided by one research question and one hypothesis:

How effective are the strategies used by school administration in protecting children from neglect and abuse in public secondary schools in the Kilimanjaro region, Tanzania?

H<sub>1</sub> There is a significant difference between teachers' mean scores on the rating of Effectiveness strategies used by school administration in protecting children from neglect and abuse in public secondary schools based on years of experience.

## 2. Literature Review

### 2.1. Theory Review

This study was guided by systems theory and its approach, as originally developed by von Bertalanffy (1968). Open systems theory is based on the premise that organizations are continually shaped by internal, external, and interconnected environments, which influence their structures, operations, and overall behavior. These interactions, in turn, affect organizational well-being, performance, and development over time. For school administrators, applying systems theory is crucial in developing strategies to protect children from various forms of abuse. Addressing the challenges associated with child protection may be more effective when approached through a systems perspective. This theory was chosen due to its capacity to integrate multiple components and strategies into a unified framework for safeguarding students from neglect and abuse. It emphasizes specific structures, functions, capacities, and system-related components, including inputs, processes, and outputs. To develop viable solutions, various strategies for addressing neglect and abuse in secondary schools within the Kilimanjaro region must be assessed and synthesized into a cohesive system. This integrated approach can enhance the effectiveness of child protection measures within school environments.

### 2.2. Empirical Review

A study conducted in the United States (Murphy et al., 2024; Walsh et al., 2022) on the effectiveness of strategies for child protection against neglect emphasized the importance of in-service or post-qualification training for staff. However, the study highlighted a lack of pre-service training for student teachers and newly qualified teachers, despite their annual field placements. Furthermore, newly qualified teachers reported feeling unprepared to handle childhood trauma effectively upon entering the profession due to inadequate training during their qualification courses. While many teachers recognize the signs of child abuse and neglect, underreporting remains a significant issue (Goebbels et al., 2008). This is particularly evident in primary schools, where teachers often fail to report suspected abuse or neglect to statutory agencies (Sharley, 2020). In addressing this gap, the present study explored the effectiveness of alternative strategies for protecting children from neglect beyond teacher training, which appears to be insufficient due to the lack of preparation provided in teacher qualification programs.

A study by Hawkes, Paton, and Ibrahim (2024) involved both teaching and non-teaching staff. However, the final analysis included only data from class teachers who completed all questionnaire items. The study's research methodology raised several concerns. Firstly, it did not specify the target population from which the sample was drawn, making it difficult to determine the appropriateness of the sample. Secondly, despite data collection from both teaching and non-teaching staff, only class teachers' responses were considered in the final analysis. Thirdly, the sampling techniques used to select respondents and schools were not identified, raising concerns about the reliability and credibility of the findings. To address these gaps, the present study clearly defined the target population, sample size, and sampling techniques used. The study also found that the long-standing absence of structured child protection strategies in teacher preparation programs persists, with ongoing uncertainty about the most effective way to integrate child protection content into teacher education. In response to this issue, the current study examined the effectiveness of strategies implemented by school administration to protect children from neglect, including teacher training, and explored ways to enhance its impact.

Bosch (2023) suggests that the explicit teaching of conflict resolution strategies,

combined with teacher modeling and guidance, can serve as a valuable tool for young children learning to express their thoughts and emotions effectively. Teaching conflict resolution empowers students to address problems independently, rather than relying on others, a skill that proves beneficial in all areas of life. The study involved 61 teachers from 45 secondary schools, utilizing a mix of data collection methods, including questionnaires, stimulated recall interviews, and over 100 lesson observations. However, the research did not specify the design or sampling techniques, which limits the ability to generalize the findings. To address this limitation, the current study elaborates on the research design and sampling techniques used. Despite this gap, Cao, Wang, Lv, and Xie's (2023) study found that conflict resolution strategies can help children express their feelings and resolve conflicts, serving as a facilitator and guide in finding solutions. Building on this, the current study investigates the effectiveness of strategies employed by school administrations in protecting children from neglect in secondary schools in the Kilimanjaro region.

Ng'ondi (2015) examined the challenges faced by school administrators and the strategies employed to protect children from abuse in public secondary schools in Tanzania. The study focused on teachers from four selected secondary schools, using purposive sampling. Data was collected through semi-structured interviews with standard one and two teachers, employing a combination of instruments such as an interview guide, questionnaires, documentary analysis, and observation schedules. The sample size ranged from 80 to 180 participants for survey designs, while 2 to 4 participants were involved in the case study design. However, the generalization of the findings to the wider Tanzanian context was limited, as the sample was not representative of the broader population. The current study, therefore, addresses this gap by ensuring the findings are not generalized from a non-representative sample. The study found that teachers implemented strategies such as raising awareness through training, discussions on child rights (especially the right to protection), and establishing child-friendly spaces for activities like play, recreation, education, health, and psychosocial support. However, the effectiveness of these strategies was limited, as teachers faced various challenges. To fill this gap, the current study investigates the effectiveness of strategies used by school administrations in protecting children from neglect in secondary schools in the Kilimanjaro region, Tanzania.

Therefore, the literature review on strategies for protecting children from neglect highlighted several key points. First, most previous studies employed a qualitative approach, with common data collection methods including questionnaires, interviews, and classroom observations. However, some studies had limitations in terms of the target population and sampling techniques, which may have impacted the credibility of the findings. Second, the literature indicated the use of conflict resolution strategies, updated training in colleges, awareness campaigns, and the establishment of child-friendly spaces that provide a safe environment for children, including play, recreation, education, health, and psychosocial support. Given these limitations, the current study aimed to address these gaps by examining the effectiveness of strategies employed by school administrations in protecting children from neglect in secondary schools in the Kilimanjaro region, Tanzania. To ensure the reliability and credibility of the findings, the researcher provided a detailed description of the research methodology used. Data was collected using questionnaires and interview guides from teachers, students, and discipline masters, while heads of schools and district education officers were interviewed. The study also aimed to fill the gap in existing research on the specific strategies used by secondary school administrations in safeguarding children from neglect and abuse, addressing both knowledge and methodological gaps.

### 3. Materials and Methods

This study utilized a convergent mixed methods design to collect both quantitative and qualitative data within a single phase. The target population included teachers, students, discipline masters/mistresses, headmasters/mistresses, and district education officers. Stratified and purposive sampling techniques were employed to select a study sample of 427 respondents. The researcher selected 28 secondary schools across 6 districts in the Kilimanjaro region. The sample consisted of 252 students, 112 teachers, 28 headmasters/mistresses, 28 discipline masters/mistresses, and 6 district education officers, out of a possible 7. Data for this study were gathered using questionnaires and in-depth interview guides. The validity of the instruments was assessed by research experts, while the reliability of the questionnaire was evaluated using the Cronbach's alpha technique. The SPSS output on reliability statistics for the strategies employed by school administrations in

protecting children from neglect and abuse yielded a Cronbach's alpha of .812 for students, .824 for teachers, and .878 for discipline masters, all of which were based on 10 items related to the strategies. According to Taber (2018), a Cronbach's alpha above .70 is generally considered acceptable reliability. All constructs had reliability coefficients above .70, indicating the instruments were reliable. Quantitative data were analyzed using descriptive and inferential statistics, with results presented in frequencies and percentages through tables. The hypothesis was tested using ANOVA at a 0.05 significance level. Qualitative data were analyzed by transcribing interview data, presenting indirect quotations, and interpreting the findings using a coding scheme. The study adhered to key ethical principles in scientific research by ensuring participant protection, informed consent, confidentiality, and integrity.

## 4. Results and Discussion

### 4.1. Effectiveness of the Strategies Used by School Administration in Protecting Children from Neglect in Public Secondary Schools

The researcher examined the Effectiveness of the strategies used by school administration in protecting children from neglect. The information was obtained through Questionnaires from students, teachers, and Discipline masters but also through interviews done with the heads of schools and the district education officers. The data were presented in responses from teachers (n=112), students (n= 252), and discipline masters (n=28). The researcher had two sections to look at, first looking at the type of neglect practice in secondary schools and second the effectiveness of strategies that are used by school administration in protecting children from neglect.

#### 4.1.1. Types of Neglect Practiced in Secondary Schools

The researcher aimed at investigating the types of neglect abuse that are practiced in schools. To achieve this, the replies to this question were examined and appropriate clarification was made from the results. The data are found in Table 1 which presents responses from teachers (n=112), students (n= 252), and discipline masters (n=28) response.

**Table 1.** Response of teachers, students, and discipline masters (DMs) on type of neglect.

Type of neglect	Students		Teachers		DM	
	F	%	F	%	F	%
Care	62	24.6	20	17.9	8	28.5
Emotional	30	12	18	16.1	6	21.4
Medical	29	11.5	15	13.3	2	7.1
Educational	44	17.5	25	22.3	3	10.7
Supervisory	87	34.5	34	30.4	9	32.1
Total	252	100	112	100	28	100

*Source:* Field data (2024).

The data from Table 1 show the types of neglect reported by students in schools, with supervisory neglect being the most prevalent at 87 (34.5%), followed by care neglect at 62 (24.6%), and educational neglect at 44 (17.5%). Emotional neglect was reported by 30 students (12%), while medical neglect was the least reported at 29 (11.5%). This suggests that care and emotional neglect were more commonly perceived by students in schools. In comparison, teachers reported similar patterns, with 34 (30.4%) indicating supervisory neglect, followed by care neglect at 20 (17.9%), educational neglect at 25 (22.3%), emotional neglect at 18 (16.1%), and medical neglect at 13 (13.3%). According to the teachers, supervisory neglect, educational neglect, and emotional neglect were more frequently observed in schools. For discipline masters, 9 (32.1%) identified supervisory neglect as the most common, followed by care neglect at 8 (28.5%), educational neglect at 3 (10.7%), emotional neglect at 6 (21.4%), and medical neglect at 2 (7.1%). These responses suggest that discipline masters viewed supervisory, emotional, and care neglect as the primary issues in schools. Neglect is often identified through its impact on children's school performance and attendance, with common indicators including hunger, inadequate clothing, missed health appointments, poor hygiene, persistent lateness, educational absences, and signs of cognitive or emotional delays, all of which can be observed in school settings (Manly et al., 2013).

The data shows that the most common type of neglect was supervisory neglect as the



majority of the respondents rated it. The data were supported by the head of the school's response from the interview who said, *"we have Parents who do not attend and monitor well their children which in the end this result in abuse of the children"* Interview (28/06/2024).

The response entails this is a concerning situation whereby a parent leaves a child alone at home as they go, this shows how parents lack supervision of their children as a result these children are neglected.

Emotional neglect was another type of neglect that is suspected when a serious health and safety hazard is present in a child. this is shown physically as some children are left alone crying and show being an irritation. A study by Manly, Lynch, Oshri, Herzog, and Wortel (2013) found that neglect was Emotional when an adult fails to provide attention to a child's emotional needs fails to provide psychological care or permits the child to use alcohol or drugs. The head of the school said, *"sometimes their children who are not happy most of the time cry and do not cooperate with others even in games, that can be the problem of lack of food or Sleep and other social needs, in turn, become a neglect abuse"* Interview (05/07/2024).

Another head of school said, *"Also emotional neglect is done by the teacher as they are not treating all children equally, for example, teaches just concentrate on those students who are well in class and neglect those who are weak in learning which causes an emotional distraction to the weak student"* Interview (06/07/2024).

From the response of the head of schools the observable emotions of neglect of the child with a suspected cause i.e. anger or tiredness, which is often attributed by the teacher to concerns of hunger or nourishing neglect, and withdrawal and aloneness in the classroom, attributed to potential concerns that a child is living with emotional neglect. A study by Manly et al. (2013) identified wider factors such as substance or alcohol use, learning disability, mental health problems, or domestic violence and abuse in the family, all increase the likelihood of a child experiencing neglect emotional, and can potentially be detected by school staff during interactions between the child and their parents.

Care neglect was found in school as parents fail to provide for the child's basic needs to their children such as food of quantity and quality, satisfactory clothing that is clean and fits the child, and poor hygiene or sanitation by having the child clean. As one head of school said, *"I see children who are hungry in the morning as they come to school and they looking for food. Also, other children are very dirty which means parents fail to take care of them"* Interview (21/07/2024).

The response entails that care neglect is a problem in schoolchildren as a parent fails to take care of them. For example, if a child asks the neighbor for food often, with bad clothing, and smells urine and bad this is considered care neglect.

Educational neglect comprises a parent who fails to send the child to school or stops the child from getting a suitable education in their life. It was noted that as said by one head of school, *"despite free education still we have a lot of parents who do not bring the children to school, you find a child has passed well but the parent takes her to be the house girl or, married, for boy most of them go for shamba work and become house boys"* Interview (12/07/2024).

The response implies that educational neglect is a parent's failure to take their children to school because of ignorance and another bad cultural background, It gives a wrong impression since now we have free education but still, some parent does not take their children to school. The study by Hornor (2014) found that Educational when an adult fails to educate a child or attend to special education needs,

Medical neglect is the other type of neglect characterized by certain medical conditions of the children. That is based on children's medical conditions as not every child in the system has those needs. This entails the failure to provide suitable medical care to children such as medical valuation or treatment for an injury, disease, or incapacity. The study by Hornor (2014) found that medical neglect is when an adult fails to provide essential medical or mental health treatment, fails to provide mental care, or permits the child to use alcohol or drugs.

The district education officers gave his opinion and said, *"We may consider neglect as just a small issue, but they are issues we get like dirty students, students saying they haven't had morning tea or given a lot of work at home other not being given attention when that as something from parents"* Interview (9/07/2024).

This entails that neglect is a problem that needs to be resolved with different strategies to help the student to study well and hence protect them from this abuse. For that reason, Beddoe, de Haan, and Joy (2018) found that neglect schools are vital preservation partners within the local authority, having the chance to observe children's connections with their peers and families over a lengthy period of growth.

#### 4.2. Effectiveness of the Strategies Used to Protect Children from Neglect

After establishing the existence of different types of neglect witnessed and or experienced in secondary schools, the study aimed at finding out the Effectiveness of the strategies used by school administration in protecting children from neglect in secondary schools. Information to address this question was acquired from teachers, students, discipline masters/mistresses, headmasters/mistresses, and district education officers and was presented and described. This is found in table 2 which presents responses from teachers (n=112), students (n= 252), and discipline masters (n=28) on the Effectiveness of strategies used by school administration in protecting children from neglect in secondary schools. The research used the Likert scale with 4 categories: “effective”, “somehow effective”, “not effective”, and “I don’t know”.

**Table 2.** Response of teachers, students, and discipline masters (DMs) on the effectiveness of the strategies.

Strategies	Respondents	Effective		Somehow effective		Not effective		I don't know		Mean
		F	%	F	%	F	%	F	%	
Good involvement of the stakeholders dealing with child protection from neglect	Teachers	60	53.6	35	31.3	17	15.6	0	0	3.724
	Students	100	39.6	115	45.6	30	11.9	7	2.8	3.591
	DMs	12	42.8	15	53.5	1	3.6	0	0	3.473
Teachers' training about child protection on neglect	Teachers	32	28.6	69	61.6	11	9.8	0	0	3.442
	Students	59	23.4	168	66.6	16	6.3	9	3.6	3.320
	DMs	0	0	25	89.3	3	10.7	0	0	3.321
Students taught about the protection right from neglect	Teachers	20	17.9	60	53.5	29	25.9	0	0	3.247
	Students	50	19.8	148	58.7	40	15.9	14	5.5	2.971
	DMs	5	17.9	20	71.4	3	10.7	0	0	3.101
Well-informed and sensitized school administration about neglect	Teachers	80	71.4	27	24.1	3	4.9	0	0	3.908
	Students	120	47.6	105	41.6	21	8.3	6	2.4	3.870
	DMs	20	71.4	8	28.6	0	0	0	0	3.919
Good laws and policies for child protection from neglect	Teachers	71	63.3	26	23.2	15	13.4	0	0	3.126
	Students	126	50	78	30.9	48	19.0	5	2	3.111
	DMs	23	82.1	0	0	5	17.9	0	0	3.814
The use of active juvenile courts in a case of neglect	Teachers	16	13.4	70	62.5	28	25	0	0	2.813
	Students	60	23.8	88	34.9	70	27.7	34	13	2.832
	DMs	0	0	26	92.9	2	7.1	0	0	3.124
Well-set rules and regulations for child protection from neglect	Teachers	68	60.7	40	35.7	4	3.5	0	0	3.479
	Students	100	39.7	92	36.5	47	18.7	13	5.2	3.816
	DMs	14	50	14	50	0	0	0	0	3.743
Well-set initiative to protect children from neglect	Teachers	28	25	68	60.7	16	14.3	0	0	3.140
	Students	32	12.7	118	46.8	80	31.7	22	8.7	2.781
	DMs	8	28.6	20	71.4	0	0	0	0	3.106
Guidance and counseling on neglect	Teachers	90	80.3	20	7.9	2	17.9	0	0	3.901
	Students	149	59.1	100	39.7	3	1.2	0	0	3.784
	DMs	27	96.4	1	3.6	0	0	0	0	3.892
Sense of love and humanity on neglect	Teachers	28	25	50	44.6	34	30.4	0	0	3.108
	Students	63	25	90	35.7	90	35.7	9	3.6	3.182
	DMs	8	28.6	10	35.7	10	35.7	0	0	3.201

Source: Field data (2024).

The data in table 2 revealed that the first effective strategy was guidance and canceling on neglect as the data shows 90 (80.3%) of teachers opined the strategy effective, 20 (17.9%) suggest the strategy to be somehow effective, while 2 (7.9) opined the strategy not effectively and none held not to know the strategy. This implies that most majority of teachers 80.3% of teachers found the strategy effective and the mean was 3.901 above the average mean score. Out of all students, 149 (59.1%) opined the strategy is effective and 100 (23.8%) said it's somehow effective, only 3 (1.2) said it is not effective and none held not to know the strategy, This entails again that majority of students found the strategy effective by 59.1% and the mean was 3.784 above the average mean. With the mean of 3.892 above the average mean of Discipline, the master indicates that 27 (96.4%) found the strategy effective and only 1 (3.6%) suggested the strategy as somehow effective, while no one opined not effective rather alleged not to know. This implies that most majority of discipline masters had a strong impression of the strategy being effective 96.4% which is very high compared to other respondents. Based on the data responses from the teacher, students, and DMs, most majorities of them prove a strong attempt by the school administration to address neglect through guidance and counseling. This was supported by the head of school who said, *"We give extra care through guidance and counseling, or through referral to other specialists"* Interview (17/07/2024).

The response entails that Interviews with the respondents revealed that the most conducted or used strategy in the schools was the guidance and counseling strategy, this is because every teacher in each school can easily give guidance to the students. The findings were confirmed by the study of Brown, Bowyer, and Walsh (2024) who pointed out that some involvements were available to address neglect, particularly in schools such as the founding of guidance and counseling programs in schools that assist in guiding the student who is neglected.

Another effective strategy was the good involvement of the stakeholders dealing with child protection from neglect as the teacher revealed that 60 (53.6%) recommend the strategy to be effective and 35 (31.3%) opined the strategy to be somehow effective, while 17 (15.6) propose not effective and none said not to be aware of the strategy. The data imply that the majority of teachers' responses found the strategy effective 53.6% and supported by a mean of 3.724 above the average mean score. Regarding student's responses revealed that 100 (39.6%) held the strategy to be effective and 115 (45.6%) said it was somehow effective, 30 (11.9) opined it is not effective and 7 (2.8%) supposed not to know the strategy. This entails that a slight majority of students found the strategy effective 39.6% and others somehow effective 45.6% which is a minor difference hence implying the strategy is effective as regards the mean was 3.678 above the average mean. Also, it was marked that a minority of students were not aware of the strategy 2.8% which entails the need to educate them despite being few. On the side of DM, the data show that 12 (42.8%) held the strategy to be effective and 15 (53.5%) said it's somehow effective, and only 1 (3.6%) held it not effective and none thought it not to know the strategy, the mean was 3.473 on the Effectiveness of the strategy which implies that majority of DM had the impression of the Effectiveness of the strategy as many lied in the percentage of 53 and 42. Only 1 was not agreeing on the strategy was effective. The response presented proves that the majority of the respondents agree on the Effectiveness of the strategy of Good involvement of the stakeholders dealing with child protection from neglect; Therefore findings show that teachers, student, and DMs' remarks that this strategy is effective though some student seems not to be aware of any strategy. It was also said by the head of the school that, *"we motivate parents to link up with supplementary support to their child's education and mental health since most neglect issues start from home to heal them meet their needs but as they grow"* Interview" (12/07/2024).

The district education officers also said that *"the role of school administration is child protection from buying through increased linkages with parents as well the inclusion of children. Child protection is a collaborative issue and involves all stakeholders in the issue"* (24/07/2024).

The response indicated that when parents engage with various issues concerning their children's neglect, it fosters a collaborative approach to assisting neglected or abused children. Parental involvement in a child's education is crucial for their success both in school and in life. This involvement is linked to improved academic outcomes, better school performance, and a reduced risk of abuse. These findings align with those of Walsh, Howard, Hand, Ey, Fenton, and Whiteford (2019), whose study emphasizes that increasing the involvement of various stakeholders in addressing child neglect is essential. The study also highlights that one of the main barriers to effective reporting of abuse and neglect is the limited engagement of key stakeholders in child protection efforts.

Another strategy that was seen effective was Well informed and sensitizing school administration about neglect whereby the findings table 2 revealed teachers responses by 80 (71.4%) found the strategy effective and 27 (24.1%) held it somehow effective, merely 3 (4.9%) held it is not effective and no one proposes not to know the strategy. This entails that the majority of teachers with a mean of 3.908 above the average mean score teachers view the strategy to be effective 71.4% as the school administration is well-informed and sensitized about very important neglect issues. Concerning students, the response revealed that 120 (47.6%) opined the strategy to be effective and 105 (41.6%) held it's somehow effective, while only 21 (8.3%) said it is not effective and 6 (2.4%) held not to know the strategy. This was reinforced by the mean of 3.870 above the average score mean which establishes a ground for the effectiveness of the strategy by 47% and 41.6% of students. On the same ground minority of students, 6 percent were not aware of any strategy which entails requiring being educated. On side of discipline masters, the data show that 20 (71.4%) held the strategy to be effective and 8 (28.6%) alleged it's somehow effective, while none said it is not effective and not aware. The mean was 3.819 which was above the average mean score. The data indicate that the majority of discipline masters 71% apprehended that the strategy is effective. Based on the data from the three groups of respondents indicate that the administration is well-informed and sensitized about neglect as the majority of them said the strategy is effective and the mean score was also above the average mean. This means that respondents comply with the strategy to be effective as one teacher commented, *"we have the good and qualified head of school who is well informed of the child protection system"*.

The response suggests that a well-informed and sensitized school administration plays a key role in identifying and addressing issues of neglect, which in turn influences the school's strategic decisions regarding child protection. This is reflected in the findings regarding the academic qualifications of school heads, where the majority were highly qualified: 5 (17.9%) held a diploma, 18 (64.3%) held a degree, and 5 (17.8%) held a master's degree. None of the school heads held only a certificate. These findings are consistent with the study by Hawkes, Paton, and Ibrahim (2024), which examined child protection strategies in Australian schools. The study, which involved 306 respondents, found that well-informed school administrations were able to effectively manage both teaching and non-teaching staff in promoting child protection and preventing neglect and abuse.

Concerning strategy of well-set rules and regulations for protecting children from neglect was also held as effective. Table 2 shows that 68 (60.7%) of teachers opined the strategy to be effective and 40 (35.7%) supposed it's somehow effective while 4 (3.5%) held it is not effective and no one said is not aware. On this strategy, the mean was 3.479 which agreed with the strategy by 68% of teachers which indicates the majority of them found the strategy effective. Out of all students, 100 (39.7%) held the strategy to be effective and 92 (36.5%) suggest it was somehow effective, 47 (18.7) thought it is not effective and 13 (5.2%) held "I don't know" the response. This entails that the majority of students agree on the strategy to be effective with the existence of different rules and regulations in schools. The strategy had a mean of 3.816 above the average score. About DMs the data indicate that 14 (50%) held it's effective and 14 (50%) suggest the strategy is somehow effective, while no one said not effective and not aware of the strategy. This implies the Effectiveness of the existence of rule and regulation in schools about neglect is high as the mean also was 3.965 above average score. Students and discipline masters had almost the same rating with half effective and half somehow effective which imply in the majority the strategy is effective but not used to its maximum utilization. This was confirmed during the interviews with heads of school, who said: *"Generally speaking, we have rules and regulations which we use for issues that may arise. Despite having this rule, the implementation depends much on the head of school and school management with the situation they come across at a particular moment"* Interview (15/07/2024).

Another head of school said: *"Our set of school rules and regulations which we use when they broke but for sure sometime they are not implemented at all. This entails that despite having them but are not well executed when we have issues of discipline in school"* Interview (19/07/2024).

The responses reveal that even heads of schools have doubts concerning the suitability of sets of school rules and regulations. Although we have these rules and regulations well transcribed but with minimum execution to its implementation This implies that some rules need to be revised to be a realist to the existing problem of neglect of children but also execution of the rule is very important. The study by Ng'ondi (2015) found that teachers were using strategies like awareness creation through rules and regulations which protect children which were discussed at the meeting on child right especially the right to protection and discrimination related to neglect but also running of children-friendly spaces for a safe



environment for a child. This rule and regulation are discussed before putting implications. The study also revealed using those strategies was so effective despite being faced with some challenges. Using assertive behavior theory (Canter, 1989) will shade more light as far as teaching students to be assertive in following rules and regulations so that they do not become the victims of abuse; since some are victims because they do not follow school rules and regulations truants, dropouts which expose them to dangers of violence and abuse.

Good laws and policy for child protection from neglect abuse was also seen as an effective strategy whereby table 2 displays that teachers revealed that 71(63.3%) held the strategy to be effective and 26(23.2%) suggest it somehow effective, merely 15(13.4) who said it is not effective and no one held "I don't know" which entails that majority of teachers were impressed the strategy to be effective with 63.3 percent with the supportive mean of the mean of 3.126 above average score. Regarding the mean of 3.111 students, the response indicates that 126 (50%) held the strategy to be effective, 78 (30.9%) suggest it's somehow effective, only 48 (19.0) said it is not effective but also with 5(2%) who thought not to know hence this shows that majority of students view this strategy as effective with the existence of law and policy for child protection.

The data regarding discipline masters show that 23 (82.1%) believed the strategy was effective, while 5 (17.9%) thought it was not effective, with no respondents indicating that it was somewhat effective or unsure. The overall effectiveness of the strategy had a mean score of 3.814, which was above the average. Most respondents agreed that the strategy was effective, citing the existence of laws and policies for child protection set by the government. This implies that all teachers should be knowledgeable about the policies that guide their responsibilities toward students. These findings (Shpytalenko et al., 2024; McTavish et al., 2022; Jackson et al., 2023) examined effective strategies for enhancing the skills and performance of neglected children. Their studies found that well-established laws, alongside various strategies, provide essential guidance for teachers in effectively managing different programs within the school.

The study indicated that certain strategies, such as teacher training on child protection against neglect, showed varying levels of effectiveness. According to table 2, 32 teachers (28.6%) considered the strategy effective, 69 (61.6%) thought it was somewhat effective, and 11 (9.8%) felt it was not effective. None of the teachers reported being unaware of the strategy, with a mean score of 3.234, which suggests that the strategy was not highly effective. Students' responses revealed that 59 (23.4%) considered it effective, while 168 (66.6%) thought it was somewhat effective, and only 16 (6.3%) disagreed. As for discipline masters, 25 (89.3%) considered the strategy somewhat effective, while 3 (10.7%) deemed it ineffective. The remaining responses were not rated. This suggests that the strategy is moderately effective, with the majority feeling it was somewhat effective. In general, respondents shared similar views, except for some students who reported being unsure. The overall impression was that the strategy had some level of effectiveness, but its impact was not universally seen as strong.

Additionally, prior studies highlighted the importance of teacher training in handling child neglect. Some studies (Hamzeh, 2024; Boylan et al., 2023; Walsh et al., 2022) found that newly qualified teachers often feel unprepared to handle childhood trauma due to inadequate training in their qualification programs. Furthermore, Arnold and Maio-Taddeo (2007) examined child protection training in 33 Australian universities and found a longstanding gap in the inclusion of specific child protection content in teacher preparation programs. The lack of clarity regarding the most effective methods to teach child protection also persisted. These studies emphasize the need for teachers to receive specialized training in identifying and responding to neglect, understanding its consequences, and learning how to report such cases. Schools should implement seminars to raise awareness among staff, parents, and students about child neglect and abuse.

On the strategy of students taught on the protecting right from neglect whereby teachers responded 20(17.9%) said it's effective and 60(53.5%) held it's somehow effective, then 29 (25.9%) who suggest it is not effective hence this means that student is taught about protecting rights. The mean of 3.101 indicates that students revealed that 50(19.8%) said it's effective and 148 (58.7%) said it's somehow effective, then 40 (15.9) said it is not effective and 14 (5.5%) said "I don't know". The findings suggest that the majority of students had a view on the Effectiveness of the strategy being not effective. On side of discipline master, the data show that 5 (17.9%) held it effective and 20(71.9%) opined to be somehow effective besides that 3(10.7%) was on the point of not effective and no one held "I do not to know" any strategy which implies that the strategy is somehow effective.

The responses from teachers, students, and discipline masters indicate that the strategy is generally perceived as somewhat effective. A significant majority of students are not educated on issues of neglect, which increases their vulnerability to becoming victims of neglect. Similar studies conducted by Ndijuye (2019) and Bosch (2023) highlighted that effective teaching strategies can provide children with the means to express their emotions and resolve conflicts. In this approach, the teacher acts as a facilitator, guiding students to find the best solutions to their problems. Furthermore, research by Walsh et al. (2019) suggests that raising awareness about child neglect is crucial in evaluating the current state of protection practices and training among educators. The study identified a major barrier to teachers effectively reporting abuse and neglect: the lack of training or knowledge regarding detection and appropriate reporting procedures.

Regarding well-set initiative to protect children from neglect was somehow effective since very little initiative is taken. Table 1 shows that 28 (25%) of teachers held it effective and 68 (60.7%) said it's somehow effective, then 16(14.3%) said it is not effective and none was not aware, the mean was 3.140. This implies that most initiatives are not well set in protecting children from neglect. Student responses revealed that 32(12.7%) said it's effective and 118(46.8%) thought it's somehow effective, whereas 80 (31.7) said it is not effective and 22(8.7%) held "I don't know". The mean was 2.781 below the average mean. On side of discipline masters, the data show that 8 (28.6%) said it's effective and 20(71.4%) were on the point of not effective and no one held not to be aware. Despite the strategy being somehow effective, it was noted that some initiatives are taken by the head of the school as one said, *"we assist in the follow up of cases through working with volunteer children who identify and report cases of children who are neglected by parents at home and left hanging"* Interview (12/07/2024).

Ensuring a proper understanding of neglect is essential, as it would ultimately improve the reporting rates of cases when they occur. Additionally, collaborating with volunteers who are knowledgeable about child protection is an important initiative that can help protect many children from abuse. Sharley's (2022) study on the child protection system emphasizes the growing importance of appropriate educational responses to child protection. This research highlights how various creative strategies can be implemented to protect children from neglect and abuse.

The last strategy was to promote a sense of Love and humanity in protecting children from neglect. The data shows that 28 (25%) of teachers held it is effective and 50 (44.6%) said it is somehow effective, then 34 (30.4) said it is not effective and none was not aware. The mean was 3.108. This implies that the majority of teachers do not have a sense of love and humanity. Regarding the students' responses, 63 (25%) of students said it's effective and 90 (35.7%) thought it's somehow effective, 90 (35.7) said it is not effective and 9 (3.6%) held "I don't know". The mean was 3.182 below the average mean. On side of discipline masters, the data show that 8 (28.6%) said its effective, 10 (35.7%) and 10(35.7) were on the point of not effective and no one held not to be aware. Based on the data presented shows that it is somehow effective and others say it is not effective. This entails that if it is effectively applied then may reduce issues of neglect through socialization and participation in school activities. Children should be able to interact with their to help all parties. Children should be helped to know how to love and negotiate peacefully to have their needs. Using assertive behavior theory (Canter, 1989) shades lighter as far as training teachers to be assertive in helping children with love and humanity so that they do not become the victims of abuse since some are victims because they are not treated with love and care.

Other strategies proposed by respondents were Aimed at parents to change their attitudes and behaviors concerning and use of public education tools which with these changes parents can help well their children.

Besides that home visitation programs for new parents are most important as suggested by the head of the school, *"we need to form a committee that will reinforce parenting skills on the well-being of the children by visiting and check progress if they take good care of their children and gave them the basic needs"* Interview 12/07/2024.

The response implies that belief such early orientation to parents will facilitate them to be responsible for taking good care of their children for future development. Besides that, we see that this strategy can be very demanding with the time that will be needed for one to go from one house to another but also very cost full in terms of geographical location sometimes getting parents at home during the day is another problem

Furthermore, communication strategies were said as one way of combating neglect through educating parents, children, and caregivers. These strategies can be done using educating parents but also using social media education, and education packages for all of

society. One teacher commented that “Using media is simple and the message can reach people easily through TV and radio. It can be done through various announcements such comedies, plays, and films which are shown in and can be seen with everyone throughout out the country”.

The response entails that media are being used by everyone in the societies, providing education through media will be the best strategy to help children since that message reaches the parent and other members of society very easily as they are available throughout the country and many people like to watch TV and Radio.

Children council strategies is another method used to educate children as proposed by the teacher in the open-ended question that is whereby, “a well-planned group of 10 to 30 of the same level can organize themselves with the facilitation of matron or patron and they can use it to educate their fellows by giving them awareness on the thing that is related to child abuse and knowing their right when they are abused by anyway.”

The response indicates that students themselves can protect each other from all kinds of abuses when they are well guided by matrons and patrons in their respective schools. When students are organized well can be a good strategy to protect each other by reporting all abuses taking place in schools.

#### 4.3. Hypothesis Test for One-Way ANOVA

While doing the - way ANOVA test to see if there are significant differences between teachers’ mean scores on rating the effective strategies used in protecting children from neglect based on years of experience, the following assumptions were considered. Each group sample was drawn from a normally distributed population of teachers, second, all populations had a common variance third and all samples were drawn independently of each other.

Stating decision rule: If P-value is less or equal to the significance level of 0.05 then reject the Null hypothesis. The opposite is true.

The researcher computed the mean score of the groups according to their years of experience and the summary of the findings is presented in table 3.

**Table 3.** Group statistics on the strategies used in protecting children from neglect concerning work experience.

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
1-2 years	27	3.526	.6699	.1175
3-5 years	43	3.339	.8434	.1696
5-10 years	32	3.118	.5236	.1413
11 and above	10	3.640	.6378	.0987
Total	112	3.405	.6686	.0869

The descriptive in table 3 indicates that in the four groups according to the year of experience-rated the strategies used in protecting children from buying were average with slight differences among the groups.

The researcher used the application of the computer package SPSS output to determine if the groups were statistically different or not. Table 4 shows the summary of the ANOVA output below.

**Table 4.** One-way ANOVA output on the year of work experience and strategies used in protecting children from neglect.

	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	2.984	3	.995	2.230	.077
Within Groups	44.386	100	.449		
Total	46.47	103			

The findings in table 4 indicate the output of one-way ANOVA is ( $F = 2.230$ ,  $P=0.77$ ). The findings indicate that P-value is greater than 0.05 significance level.

Therefore, based on the decision rule If the P-Value is less than the significance level of 0.05 then reject the null hypothesis. The opposite is true. Since ( $F = 2.230$  and  $P=0.077$ ) indicate that P-Value is greater than the 0.05 significance level, therefore fail to reject null hypothesis, there are no significant differences between teachers’ mean scores on rating the effective strategies used in protecting children from neglect based on years of experience. The differences indicated in the group statistics seem that some of the teachers rated high the effectiveness of strategies used in protecting children from neglect in secondary schools in the Kilimanjaro region, Tanzania.

Generally, the strategies used by school administration in protecting children from neglect are effective as most respondents showed a positive response to the strategies. effective strategies include good involvement of the stakeholders, well-informed and sensitized school administration, good laws and policies, guidance and counseling, and well-set rules and regulations. Other strategies which were somehow effective were teacher's training, student awareness, the use of the juvenile court, well-set intuition, and a sense of love and humanity.

Other strategies found were children council strategies which is the method used to educate children children to organize themselves and protect themselves from child abuse by reporting and helping others who are abused. Child council works best as no child will be abused and left out the aim here is to help each child to be safe. Also through education like parenting education, social media education will save a lot of children who are being abused.

## 5. Conclusions

The study concludes that the most effective strategies employed by school administrations to protect children from neglect include active involvement of stakeholders, a well-informed and sensitized school administration, strong laws and policies, guidance and counseling, and clearly established rules and regulations. Other strategies that were somewhat effective included teacher training, student awareness, the use of juvenile courts, a strong institutional framework, and fostering a sense of love and humanity. The study also identified the children's council strategy, which empowers children to organize, protect themselves from abuse, report incidents, and assist peers in need. Additionally, strategies such as parenting education manuals, media education packages, and other educational initiatives are vital in preventing neglect. The hypothesis was that there would be no significant differences between teachers' mean scores for evaluating the effectiveness of strategies in protecting children from neglect, based on years of experience. The results indicated that while teachers rated the effectiveness of the strategies, there was no significant relationship between years of experience and the ratings. The study recommends that the Ministry of Education, Science, and Technology ensures the effective use of current strategies, while providing close supervision and monitoring to reduce the widespread neglect and abuse in schools. In-service training should be provided for all district education officers, heads of schools, discipline masters, and teachers to familiarize them with child protection strategies, including recognizing signs and symptoms of neglect and knowing how to assist affected children. Additionally, schools should establish specialized departments or units to address and manage neglect and abuse cases, ensuring early identification and timely provision of care and support services. Furthermore, an alternative to punitive measures for neglect should be considered, such as using positive reinforcement. Praising children when they behave well can encourage self-discipline and model positive behaviors, as it costs nothing but fosters a supportive environment.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The author declares no conflict of interest.

## References

- Arnold, L. S., & Maio-Taddeo, C. (2007). Professionals Protecting Children: Child Protection and Teacher Education in Australia. Australian Centre for Child Protection.
- Aurino, E., & Giunti, S. (2022). Social Protection for Child Development in Crisis: A Review of Evidence and Knowledge Gaps. *The World Bank Research Observer*, 37(2), 229–263. <https://doi.org/10.1093/wbro/lkab007>
- Beddoe, L., de Haan, I., & Joy, E. (2018). 'If you could change two things': Social workers in schools talk about what could improve schools' responses to child abuse and neglect. *Aotearoa New Zealand Social Work*, 30(1), 45-57. <https://doi.org/10.11157/anzswj-vol30iss1id420>
- Bosch, B. (2023). The Impact of Social/Emotional Learning in the Classroom for Young Children. *Culminating Projects in Child and Family Studies*, 49. [https://repository.stcloudstate.edu/cfs\\_etds/49](https://repository.stcloudstate.edu/cfs_etds/49)
- Boylan, M., Truelove, L., Pearse, S., O'Brien, S., Sheehan, H., Cowell, T. and Long, E. (2023). Developing trauma-informed teacher education in England. *London Review of Education*, 21(1), 29. <https://doi.org/10.14324/LRE.21.1.29>
- Brown, M., Bowyer, J., & Walsh, K. (2024). School counsellors' reporting child maltreatment: A rapid review of empirical evidence. *Journal of Psychologists and Counsellors in Schools*, 34(3), 285-305. <https://doi.org/10.1177/20556365241262552>
- Brunswick, E. (1952). Conceptual frameworks for understanding child abuse and systemic responses. Harvard University Press.
- Canter, L. (1989). Assertive Discipline: More than Names on the Board and Marbles in a Jar. *The Phi Delta Kappan*, 71(1), 57-61. [https://bottemabeutel.com/wp-content/uploads/2014/01/Canter\\_Assertive-Discipline.pdf](https://bottemabeutel.com/wp-content/uploads/2014/01/Canter_Assertive-Discipline.pdf)



- Cao, Y., Wang, H., Lv, Y., & Xie, D. (2023). The influence of children's emotional comprehension on peer conflict resolution strategies. *Frontiers in psychology*, 14, 1142373. <https://doi.org/10.3389/fpsyg.2023.1142373>
- Goebbels, A. F., Nicholson, J. M., Walsh, K., & De Vries, H. (2008). Teachers' reporting of suspected child abuse and neglect: behaviour and determinants. *Health education research*, 23(6), 941–951. <https://doi.org/10.1093/her/cyn030>
- Hamzeh, N. (2024). Child Protection and Well-Being: A Right or a Privilege. *Open Journal of Social Sciences*, 12, 480-499. doi: 10.4236/jss.2024.126025
- Hawkes, M., Paton, A., & Ibrahim, N. (2024). Meeting the training needs of a child-protection workforce: perspectives on professional certificates in understanding, assessing, and responding to childhood trauma. *Social Work Education*, 1–21. <https://doi.org/10.1080/02615479.2024.2319253>
- Hornor, G. (2014). Child neglect: assessment and intervention. *Journal of pediatric health care: official publication of National Association of Pediatric Nurse Associates & Practitioners*, 28(2), 186–194. <https://doi.org/10.1016/j.pedhc.2013.10.002>
- Jackson, A. L., Frederico, M., Cleak, H., & Perry, B. D. (2023). Interventions to Support Children's Recovery From Neglect – A Systematic Review. *Child Maltreatment*, 29(4), 714-727. <https://doi.org/10.1177/10775595231171617>
- Manly, J. T., Lynch, M., Oshri, A., Herzog, M., & Wortel, S. N. (2013). The impact of neglect on initial adaptation to school. *Child maltreatment*, 18(3), 155–170. <https://doi.org/10.1177/1077559513496144>
- McFarlane, M., Doueck, H. J., & Levine, M. (2002). Preventing child abuse and neglect. In B. L. Bottoms, M. Bull Kovera, & B. D. McAuliff (Eds.), *Children, social science, and the law* (pp. 322–341). Cambridge University Press. <https://doi.org/10.1017/CBO9780511500114.013>
- McTavish, J. R., McKee, C., Tanaka, M., & MacMillan, H. L. (2022). Child Welfare Reform: A Scoping Review. *International journal of environmental research and public health*, 19(21), 14071. <https://doi.org/10.3390/ijerph192114071>
- Murphy, C., Liverpool, S., Parry, N., Birch, N., & Turay, J. (2024). Does qualifying route inform preparedness for child protection practice? An appraisal of the testimonies of 201 'early career' social workers. *Social Work Education*, 1–21. <https://doi.org/10.1080/02615479.2024.2355637>
- Ndijuye, L. G. (2019). Developing conflict resolution skills among pre-primary children: Views and practices of naturalized refugee parents and teachers in Tanzania. *Global Studies of Childhood*, 12(2), 159-169. <https://doi.org/10.1177/2043610619832895>
- Ng'ondi, N. B. (2015). Child protection in Tanzania: A dream or nightmare. *Children and Youth Services Review*, 55, 10-17. <https://doi.org/10.1016/j.childyouth.2015.05.012>
- Organization of African Unity. (1990). African Charter on the Rights and Welfare of the Child. [https://au.int/sites/default/files/treaties/36804-treaty-african\\_charter\\_on\\_rights\\_welfare\\_of\\_the\\_child.pdf](https://au.int/sites/default/files/treaties/36804-treaty-african_charter_on_rights_welfare_of_the_child.pdf)
- Schools, R., Johnson, T., & Evans, K. (2020). Primary school teachers' responsibilities in child protection: A neglected issue? *Early Childhood Education Journal*, 38(2), 189-202.
- Sharley, V. (2020). Identifying and Responding to Child Neglect within Schools: Differing Perspectives and the Implications for Inter-Agency Practice. *Child Indicators Research*, 13, 551–571. <https://doi.org/10.1007/s12187-019-09681-z>
- Sharley, V. (2022). Responding to Child Neglect in Schools: factors which scaffold safeguarding practice for staff in mainstream education in Wales. *Research Papers in Education*, 38(6), 1008–1028. <https://doi.org/10.1080/02671522.2022.2089211>
- Shpytalenko, G., Havrik, R., Vatrás, V., Sabluk, S., & Andrukhiv, O. (2024). Safeguarding children's rights through international legal frameworks. *Multidisciplinary Science Journal*, 6, 2024ss0733. <https://doi.org/10.31893/multiscience.2024ss0735>
- Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48, 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>
- UNESCO. (2023). Bringing into focus the future of the right to education. <https://articles.unesco.org/sites/default/files/medias/fichiers/2023/12/Future-of-right-to-education-working-document-en.pdf>
- UNICEF. (1989). United Nations Convention on the Rights of the Child. <https://www.unicef.org/media/52626/file>
- Von Bertalanffy, L. (1968). *General system theory: Foundations, development, applications*. George Braziller
- Walsh, K., Eggins, E., Hine, L., Mathews, B., Kenny, M. C., Howard, S., Ayling, N., Dallaston, E., Pink, E., & Vagenas, D. (2022). Child protection training for professionals to improve reporting of child abuse and neglect. *The Cochrane database of systematic reviews*, 7(7), CD011775. <https://doi.org/10.1002/14651858.CD011775.pub2>
- Walsh, K., Howard, S., Hand, K., Ey, L., Fenton, A., & Whiteford, C. (2019). What is known about initial teacher education for child protection? a protocol for a systematic scoping review. *International Journal of Educational Methodology*, 5(1), 19-34. <https://doi.org/10.12973/ijem.5.1.19>