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Health Promotion in Primary Schools

This research focused on the role of primary schools, which are often mentioned as a setting for health promotion activities (Brooks, 2012). Children spend 40-45% of their waking hours in school (Fairclough et al., 2008), during key years of the development of healthy behaviours (Jenson et al., 2013). The research aimed to understand how health and emotional wellbeing is promoted in primary schools. The health promotion priorities for primary school-aged children were inline with national and global priorities of childhood obesity (World Health Organisation, 2015; Department of Health, 2011a), physical activity (World Health Organisation, 2014a; Department of Health, 2011b) and emotional wellbeing (World Health Organisation, 2014b; Department of Health, 2013).

Specific objectives for the research were set to: assess schools' priority to the health and emotional wellbeing of children; explore schools' engagement to health promotion activities; and explore the relationships between partners and school.

Literature Review

Schools are required to promote health and wellbeing with partners in the context of their communities (Department of Education, 2006; 2010); however, there are few documents from education regarding health and wellbeing. The National Healthy Schools Programme (NHSP) (Department of Health and Department for Children, Schools and Families, 2007) was a nationally accredited scheme, followed with a 'toolkit' which advocated the use of needs assessments to inform school's health promotion activities (Department of Education, 2011). But it is now archived and engagement to the scheme is down to individual schools (Oglivie, 2011). The majority of the strategy documents originated

from Public Health and focused upon the individual health priorities with schools mentioned. There is a sense that schools were a place where children could be accessed whilst Jenson et al. (2013) and Brooks (2012) argue that schools are integral to a child's development.

A review and coding of literature from the UK in the past 10 years, concerning health promotion in primary schools, showed that researchers rarely undertook assessments of schools before undertaking research. Exceptions to this were Smith et al. (2009) and Kippling et al. (2014) whose pre-assessments informed intervention design. The reviewed studies did not demonstrate sustainable change in health outcomes for the children with the exception of Smith et al. (2009) who utilised an ecological model to inform the interventions. Baker et al. (2013), Kippling et al. (2014), Humphrey et al. (2010) and Wolpert et al. (2013) were the only researchers to offer training to schools, albeit to deliver intervention for the research rather than to fulfil training needs. Wolpert et al. (2013) observed that teachers relied on practice-based evidence rather than employing evidence-based practice but noted that they themselves had not educated staff regarding the evidence in relation to training. Researchers also noted that schools had not continued using or refused to use resources (Humphrey et al., 2010; Gorely et al., 2010; Kippling et al., 2014) or had declined to participate (Kippling et al., 2014; Baker et al., 2013) yet it was noted by Upton et al. (2012) and Gorely et al. (2010) that teachers reported resources and/or interventions as not being suitable.

There appeared to be a lack of guidance and acknowledgement of the school's role in health promotion. However, this was interpreted from the literature rather than there being specific

research regarding their role; revealing a gap which this study sought to address.

Methods

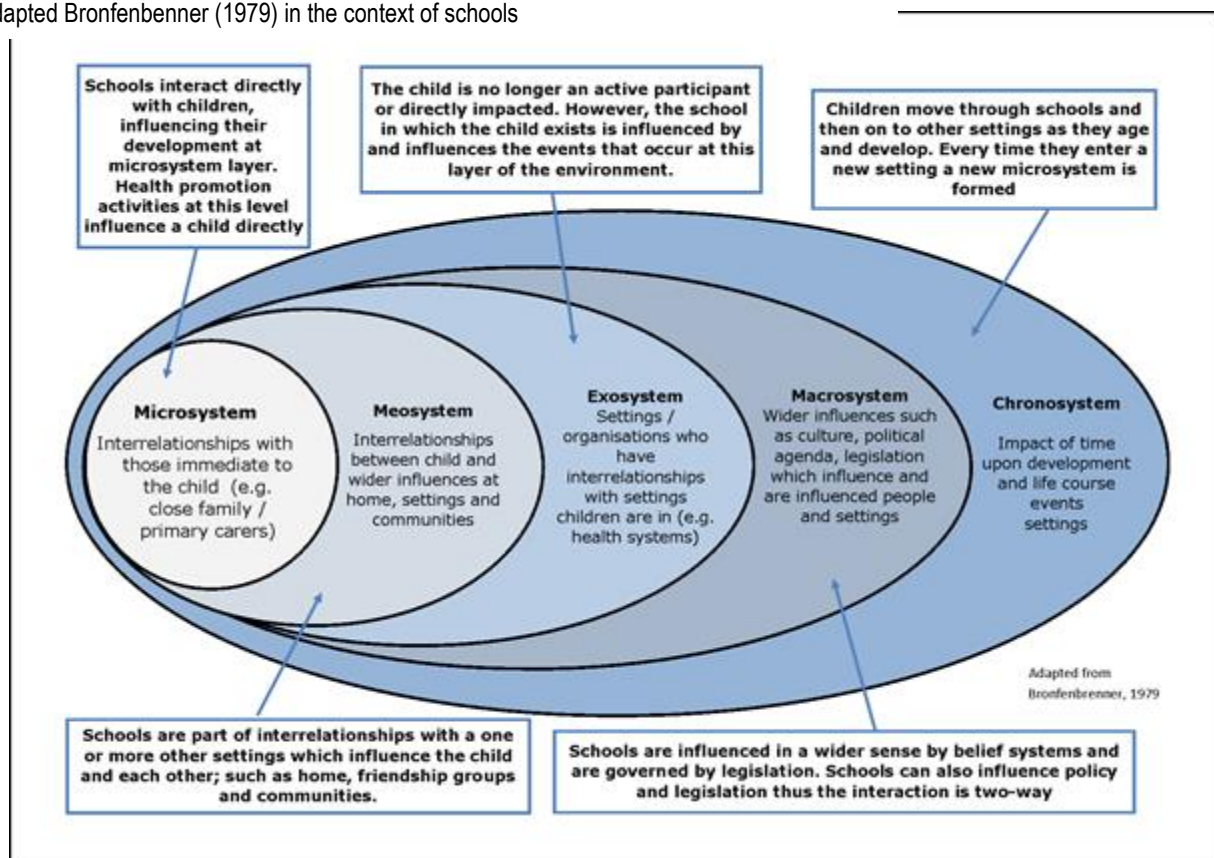
A mixed-method design was chosen to benefit from strengths of both quantitative and qualitative methodology (Bowling, 2009), and to work well with a theoretical framework (Cresswell, 2014). This research used an adaptation of Bronfenbrenner's (1979) social ecological theory, which conceived the notion of child development occurring within context of the environment. This theory was continually adapted by Bronfenbrenner (1979) and numerous interpretations exist (Tudge et al., 2009). The following adaptation was developed by the author to place schools as the contextual environment (Figure 1 below).

The overall design was an embedded concurrent mixed-methods design (Cresswell,

The main study was a descriptive, cross-sectional online survey with questions designed to offer opportunity for statistical analysis so to enhance causal associations (Bowling, 2009). The embedded study was a qualitative thematic analysis of school development plans (SDPs) which detail medium term plans, priorities, devolution of budget and action plans for the school (Levacic, 2009). Thematic analysis of these documents was undertaken with pre-determined codes alongside an inductive analysis (Braun et al., 2006).

The sample for the survey was all primary phase headteachers in one particular authority. Special schools were excluded as they have differing health service provision. Invitations for both strands of the study were made to headteachers although responses could be delegated. Recruitment and advertising was done online or by email and included pre-notification

Figure 1: Adapted Bronfenbrenner (1979) in the context of schools



2009), influenced by a theoretical framework. There was a quantitative survey to run as a main study simultaneously with an embedded qualitative document analysis while Bronfenbrenner's perspective influenced survey design and analysis of the results.

to boost response rates (Hageman et al., 2015). Problems with headteacher contacts transpired in the early stages of data collection resulting in email addresses being obtained from a public directory and sent from a university email rather than through the authority as originally planned.

It is possible that this compromised the response, especially as it occurred during the initial send-out (Shih and Fan, 2008).

The response rate for both strands of the study was low. Only four SDPs were returned and 8% of the survey sample returned completed surveys. This is much lower than the average 34% that Shih and Fan (2008) found in a meta-analysis of response rates in web-based surveys. Given the high proportion of non-responses the risk of non-response error is very high (Hageman et al., 2015) meaning that findings cannot be generalised and thus it is proposed that this research is seen as a small pilot study. It is further suggested that headteachers/schools are potentially hard-to-reach though the term is used with caution, as it can be stigmatising (Sydor, 2013). It is the responsibility of the researcher to understand their sample and apply appropriate recruitment and/or research design in order to improve engagement to research (Shaghghi et al., 2011). Full ethical approval was granted by the University School of Health Research Ethics Committee.

Findings

The main findings from the survey can be seen below followed by the results of the SDP analysis. Numbers were very small so only descriptive statistical analysis was used.

Activities

Respondents indicated health promotion activities initiated by themselves and by a partner which had been undertaken in the academic year 2013-2014 (Figure 2 below).

Figure 2: All activities

	All Activities Reported	School Initiated Activities	Partner Initiated Activities
Number of respondents	20	20	20
Mean	25	17.90	7.10
Std. Deviation	6.54539	4.42362	3.58212
Minimum-Maximum	16-44	11-26	2-18
Total	500	358	142

Despite only 20 schools having responded they reported 500 health promotion activities, a mean of 25 per school. Over two-thirds of these were initiated by the schools rather than with a partner.

Respondents were asked to rate importance of

outcomes when planning activities. Over 90% rated supporting emotional wellbeing (EWB), having a safe school and educating children on health as essential outcomes. No outcome was considered irrelevant (Figure 3 page 24).

When asked to rate importance of factors upon child development, relationships at home/school, educating parents and a positive experience at school were all rated as essential by more than 90%. Academic achievement and health promotion activities were rated as optional by 10% and only 25% rated these as essential (Figure 4 page 24).

Priorities

Results showed that 30% of respondents felt that health promotion was an essential priority in their school whilst the remaining 70% indicated that it was desirable. Priorities were also determined from the thematic analysis of the SDPs. Two themes emerged: progress and attainment along with leadership and governance. Few of the pre-determined codes for health promotion were identified and related directly to progress and attainment. Training of staff was identified from SDPs, usually related to attainment and progress though it was also found that schools worked in clusters to share best practice.

Documents and Training

Results reveal that 70% of respondents were aware of the Healthy Schools Toolkit (Department of Education, 2011), but only 35% and 30% respectively were aware of local area profiles and child health profiles recommended by the toolkits. Furthermore, only 15% knew of the JSNA. 50% had never used the documents though those who did used them to plan activities, needs assessment and educating staff.

Only one respondent (5%) reported having received training on needs assessment, though 60% had had training on the importance of health and EWB to child development and 65% had received training on the links between the healthy child and academic achievement. 70% indicated that they wanted further training and indicated that needs assessment training would be particularly useful.

Discussion

Though this research cannot be generalised, it has revealed aspects of the role schools undertake in health promotion that were

previously unreported. The small number of responding schools indicated a great deal of health promotion activity, mainly without involvement of partners.

When respondents were asked to measure the importance of factors to child development, over 90% recognised that positive relationships at home and school and a positive experience at school were essential. This view is supported by Brooks (2012) and questions the legitimacy of short term health promotion activities in schools which was indeed questioned by respondents as only 25% saw health promotion activities as essential. In addition no explicit priorities for health promotion were found in the SDPs, these focused on academic achievement which inversely promotes emotional wellbeing (Fauth and Thompson, 2009), physical activity and healthy diet (World Health Organisation, 2014a; World Health Organisation, 2015).

Applying social ecological theory as a framework to this research supported the design and interpretation of results as there was a greater understanding of the interconnecting relationships and roles that environmental determinants have on individual's health (Golden and Earp, 2012; Moore et al., 2011). Shaghghi et al. (2011) supports the view that hard-to-reach populations need to be understood better and approached in their context. One such application of knowledge to context can be seen in a headteacher bulletin by Brooks (2014), who set out health promotion opportunities against education specific legislation and Ofsted frameworks.

The schools surveyed indicated a disparity between them regarding awareness of documents and applying them to practice. This was viewed negatively in the literature (Wolpert et al., 2013; Gorely et al., 2010) but respondents identified their training needs in this research, displaying a level of self-awareness and desire to develop themselves further. Furthermore, all respondents rated their school's attitude to health promotion as essential or desirable which indicated that schools did value health promotion even though it was absent in their strategic planning.

Limitations

Applying an ecological approach sequentially to the design of the research, as per Smith et al. (2009), may have been more successful in

engaging schools as the design or indeed the design may well have been enhanced with greater understanding of the school context.

High risk of non-response error means the results cannot be generalised. This small snapshot of the schools surveyed has interesting results and indicates directions for further research.

Conclusion

The role of schools in health promotion is not disputed but is not well understood. The literature does not often present the views of schools but usually reports upon interventions performed on children in schools. Further research is needed so that schools' ecological context is appreciated and suggestions for future practice can be made. Therefore it is recommended that focus is shifted from the running of short-term interventions and instead emphasis given to understanding schools' context so as to inform and develop their health-promoting activities.

Declaration

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References

- Baker, C., Crone, D., Gidlow, C., Loughren, E., James, D. and Mahmood, T. (2013). Looking at the feasibility of using a physical activity pathway with children in school. *British Journal of School Nursing*. 8(7), pp.338-345.
- Bowling, A. (2009). *Research Methods in Health: Investigating health and health services*. 3rd ed. Maidenhead: McGraw-Hill Education.
- Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3(2), pp.77-101.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development*. Cambridge (M.A): Harvard University.
- Brooks, F. (2014). *The Link Between Pupil Health And Wellbeing And Attainment: A briefing for head teachers, governors and staff in education settings* [Online]. London: PHE. Available from: [Accessed: 15th March 2016]. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/370686/HT_briefing_layoutvFINALvii.pdf
- Brooks, F. (2012). *Life stages: school years*. In: Lemer, C. and Todd, K. (ed.) Annual report of the Chief Medical Officer 2012, our children deserve better: prevention pays [Online]. London: DH. [Accessed: 15th March 2016]. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/255237/2901304_CMO_complete_low_res_accessible.pdf
- Cresswell, J.W. (2014). *A Concise Introduction to Mixed Methods Research*. London: Sage Publications Inc.

- Cresswell, J.W. (2009). *Research Design: Qualitative, quantitative and mixed methods approaches*. 3rd ed. London: Sage Publications Inc.
- Department of Education. (2006). *Education and Inspections Act* London. [Accessed: 15th March 2016]. Available from: <http://www.legislation.gov.uk/ukpga/2006/40/contents>
- Department of Education. (2010). *Academies Act*. London. Available from: [Accessed: 15th March 2016]. <http://services.parliament.uk/bills/2010-11/academieshl.html>
- Department of Education. (2011). *Overview of the Healthy Schools Toolkit* [Online]. London: DfE. Available from: [Accessed: 15th March 2016]. <http://webarchive.nationalarchives.gov.uk/20130903123545/http://media.education.gov.uk/assets/files/pdf/h/overview%20of%20the%20healthy%20schools%20toolkit.pdf>
- Department of Health. (2013). *Improving children and young people's health outcomes: A system wide response* [Online]. London: DH. Available from: [Accessed: 15th March 2016]. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214928/9328-TSO-2900598-DH-SystemWideResponse.pdf
- Department of Health. (2011a). *Healthy Lives, Healthy People: A call to action on obesity in England* [Online]. London: DH. Available from: [Accessed: 15th March 2016]. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213720/dh_130487.pdf
- Department of Health. (2011b). *Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers* [Online]. Available from: [Accessed: 15th March 2016]. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf
- Department of Health and Department for Children, Schools and Families. (2007). *Introduction to the National Healthy Schools Programme* [Online]. London: DH/DCFS. Available from: [Accessed: 15th March 2016]. http://www.ttrb3.org.uk/wp-content/uploads/2012/10/national_healthy_schools_status_guide.pdf
- Fairclough, S.J., Stratton, G. and Butcher, Z.H. (2008). Promoting health-enhancing physical activity in the primary school: a pilot evaluation of the BASH health-related exercise initiative. *Health Education Research*. 23(3), pp.576-581.
- Fauth, B. and Thompson, M. (2009). *Young children's well-being: Domains and contexts of development from birth to age 8* [Online]. London: National Children's Bureau. Available from: [Accessed: 15th March 2016]. http://www.ncb.org.uk/media/91821/young_childrens_well_being_final.pdf
- Golden, S.D. and Earp, J.L. (2012). Social Ecological Approaches to Individuals and Their Contexts: Twenty Years of Health Education and Behavior Health Promotion Interventions. *Health Education and Behavior*. 39(3), pp.364-372.
- Gorely, T., Morris, J.G., Musson, H., Brown, S., Nevill, A. and Nevill, M.E. (2011). Physical activity and body composition outcomes of the GreatFun2Run intervention at 20 month follow up. *Journal of Behavioural Nutrition and Physical Activity*. 8(74).
- Hageman, K., Kim, A., Sanchez, T and Bertolli, J. (2015). *Survey design and implementation*. In: Guest, G. and Namey, E.E. (ed.) *Public Health Research Methods*. Los Angeles: Sage Publications Inc. pp.341-377
- Humphrey, N., Kalamouka, A., Wigelsworth, M., Lendrum, A., Lennie, C. and Farrell, P. (2010). New Beginnings: evaluation of a short social-emotional intervention for primary-aged children. *Educational Psychology: An international journal of Experimental Educational Psychology*. 30(5), pp.513-532.
- Jenson, B.B., Currie, C., Dyson, A., Eisenstadt, N. and Melhuish, E. (2013). *Early years, family and education task group: report* [Online]. Copenhagen: WHO Region Office for Europe. Available from: [Accessed: 15th March 2016]. http://www.euro.who.int/data/assets/pdf_file/0006/236193/Early-years-family-and-education-task-group-report.pdf
- Kipling, R., Howe, L.D., Jago, R., Campbell, R., Wells, S., Chittleborough, C.R., Mytton, J., Noble, S.M., Peters, T.J. and Lawlor, D.A. (2014) Effect of intervention aimed at increasing physical activity, reducing sedentary behaviour and increasing fruit and vegetable consumption in children; Active for life year 5 (AFly5) school based cluster randomised controlled trial. *BMJ*. 348. pp.1-13.
- Levacic, R. (2009). *Managing resources to support learning*. In: Bush, T., Bell, L. and Middlewood, D. (ed.) *The Principles of Educational Leadership and Management*. Los Angeles: Sage Publications Inc. pp.197-216.
- Moore, S.N., Murphy, S. and Moore, L. (2011). Health improvement, nutrition-related behaviour and the role of school meals: the usefulness of a socio-ecological perspective to inform policy design, implementation and evaluation. *Critical Public Health*. 21(4), pp.441-454.
- Oligvie, F. (2011). Policy Summary: National Healthy Schools Programme. *Lancet* [Online]. Available from: [Accessed: 15th March 2016]. <http://ukpolicymatters.thelancet.com/policy-summary-national-healthy-schools-programme/>
- Shaghghi, A., Bhopal, R. S., and Sheikh, A. (2011). Approaches to recruiting "hard-to-reach" populations into research: a review of the literature. *Health Promotion Perspectives*. 1(2), pp.86-94.
- Shih, T. and Fan, X. (2008). Comparing response rates from web and mail surveys: a meta-analysis. *Field Methods*. 20(3), pp.249-271.
- Smith, H., Grogan, S., Davey, R. and Cochrane, T. (2009). Developing a successful physical activity intervention in primary schools. *Education and Health*. 27(3), pp.67-10. Available from: [Accessed: 15th March 2016]. <http://sheu.org.uk/x/eh273hs.pdf>
- Sydor, A. (2013). Conducting research into hidden or hard-to-reach populations. *Nurse Researcher*. 20(3), pp.33-7.
- Tudge, J.R.H., Mokrova, I., Hatfield, B.E. and Karnik, R.B. (2009). Uses and Misuses of Bronfenbrenner's Bioecological Theory of Human Development. *Journal of Family Theory and Review*. 1(December 2009), pp.198-210.
- Upton, P., Taylor, C. and Upton, D. (2012). Exploring primary school teachers' experiences of implementing a healthy eating intervention. *Education and Health*. 30(2), pp.35-39. Available from: [Accessed: 15th March 2016]. <http://sheu.org.uk/sites/sheu.org.uk/files/imagepicker/1/eh302pu.pdf>
- Wolpert, M., Humphrey, N., Belsky, J. and Deighton, J. (2013). Embedding mental health support in schools; learning from the Targeted Mental health in Schools (TaMHS) national evaluation. *Emotional and Behavioural Difficulties*. 18(3), pp.270-283.
- World Health Organisation. (2015). *Obesity and overweight: Fact sheet N°311* [Online]. Geneva: WHO. Available from: [Accessed: 15th March 2016]. <http://www.who.int/mediacentre/factsheets/fs311/en/>
- World Health Organisation. (2014a). *Fact Sheet No 385: Physical Activity* [Online]. Geneva: WHO. Available from: [Accessed: 15th March 2016]. <http://www.who.int/mediacentre/factsheets/fs385/en/>
- World Health Organisation. (2014b). *Mental Health: Child and adolescent mental health* [Online]. Geneva: WHO. Available from: [Accessed: 15th March 2016]. http://www.who.int/mental_health/maternal-child/child_adolescent/en/

Figure 3: Rating of outcomes when planning activities

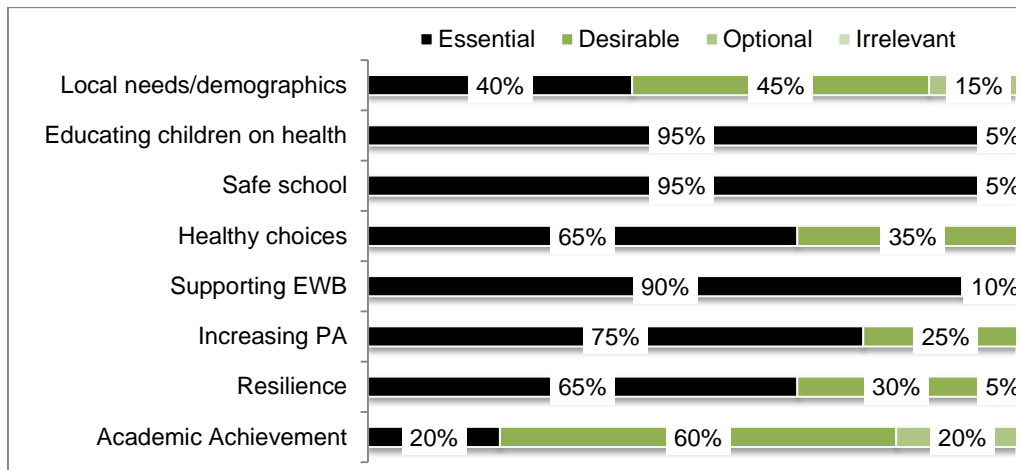
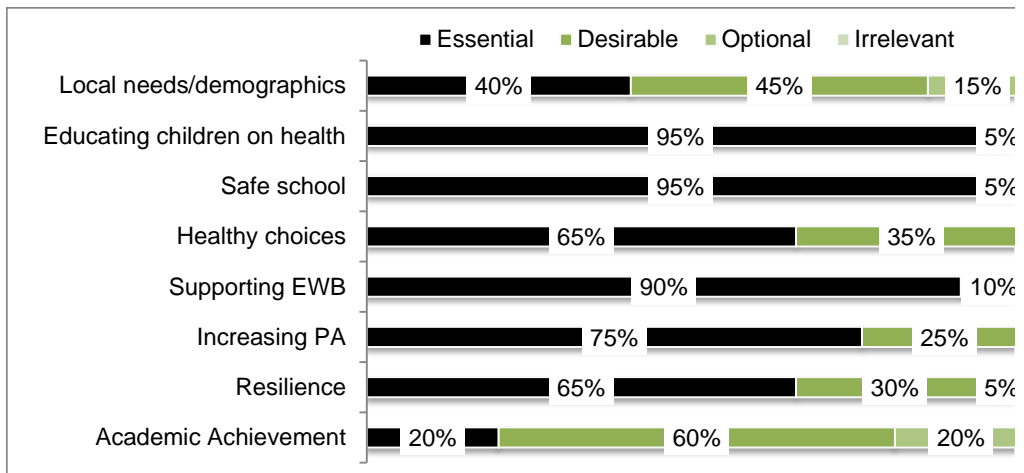


Figure 4: Importance of factors influencing child development



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