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Designing Integrated Social Marketing Interventions for Digital, Environmental, and Leadership Behaviors: Evidence from a Rural Primary School in Banyuwangi

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ABSTRACT

Pemasaran sosial menyediakan prinsip untuk merancang intervensi perilaku, tetapi masih terbatas dalam menjelaskan bagaimana desain bergerak menuju aktualisasi perilaku awal ketika perilaku sasaran berbeda dan audiens bersifat heterogen. Penelitian ini mengkaji tiga intervensi berbasis sekolah di Banyuwangi melalui perspektif pemasaran sosial dengan desain studi kasus kualitatif tunggal tertanam yang disusun secara temporal. Dataset mencakup 49 partisipan, 21 siswa, sebelas pelaksana dari universitas, enam guru, satu kepala sekolah, dan 12 orang tua/wali, serta sekitar 52 jam observasi, 20 wawancara individual, enam FGD, dan bukti dokumenter. Analisis menggabungkan pengodean abduktif yang terinspirasi pendekatan Gioia, analisis dalam unit, dan perbandingan lintas unit. Unit digital menunjukkan pembingkaian ulang perilaku dan praktik produktif yang dipandu, tetapi dibatasi kesenjangan kemampuan. Unit lingkungan menunjukkan aktualisasi perilaku yang dapat diamati secara langsung, dengan pemahaman dan daya tahan sebagai kondisi pembatas. Unit kolaboratif menunjukkan koordinasi yang saling bergantung dan pengaruh situasional yang muncul, sementara aktivitas kompetitif memicu penarikan diri pada sebagian peserta. Perbedaan lintas unit ditafsirkan melalui keterlaksanaan tindakan, keterwujudan, keteramatan, ketergantungan sumber daya, saling ketergantungan sosial, dan kecepatan umpan balik. Segmentasi yang direncanakan belum sepenuhnya menangkap heterogenitas peserta, sehingga fasilitasi adaptif lebih dibutuhkan.

Social marketing offers principles for designing behavioral interventions, but less is known about how design moves toward initial enactment when target behaviors differ and audiences are heterogeneous. This study examined three school-based interventions in Banyuwangi through a social marketing-informed lens using a temporally structured single embedded qualitative case study. The dataset comprised 49 participants, 21 students, eleven university implementers, six teachers, one principal, and 12 parents/guardians, plus approximately 52 hours of observation, 20 individual interviews, six FGDs, and documentary evidence. Analysis combined Gioia-inspired abductive coding, within-unit analysis, and cross-unit comparison. The digital unit showed behavioral reframing and prompted productive practice, constrained by capability gaps. The environmental unit showed directly observable prompted enactment, with comprehension and endurance as boundary conditions. The collaborative unit showed interdependent coordination and emergent situational influence, while competitive activity triggered withdrawal among some participants. Cross-unit variation was interpreted through actionability, tangibility, observability, resource dependence, social interdependence, and immediacy of feedback. Planned segmentation did not fully capture participant heterogeneity, increasing reliance on adaptive facilitation. The findings clarify design-to-enactment and the role of adaptive facilitation.

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INTRODUCTION

Behavioral change cannot be inferred solely from the delivery of information, increased knowledge, or participants' involvement in an activity. A meta-analysis shows that changes in knowledge and intention are not always followed by changes in behavior in the same pattern, while many behavioral measures still rely on self-report (van de Wetering et al., 2022). Research on the intention–behavior gap likewise shows that intention does not necessarily lead to action because enactment depends on the opportunities and conditions present when the behavior must be performed (Conner & Norman, 2022; Rhodes et al., 2022). A related issue arises in process evaluation, where information about what occurs during a program has not been consistently used to explain or adjust implementation (Getachew-Smith et al., 2022). The central issue is therefore not merely whether the target audience receives a message or participates in an activity, but whether intervention design creates a genuine opportunity to perform the intended behavior. This issue is closely related to designing behavior as an actionable choice that holds value for the audience and remains feasible when participants encounter implementation barriers (Rundle-Thiele et al., 2021; Dietrich et al., 2022; Akbar et al., 2021).

This issue was evident during the initial phase of activities at SD Negeri 8 Jambewangi, Banyuwangi. During the preparation period before the main interventions began, school observations and discussions with teachers were used to identify program needs. Eleven university implementers confirmed that the initial design decisions were indeed based on these two sources. Students were already familiar with digital devices, but their use was more frequently associated with entertainment, while productive use remained limited. This issue is consistent with UNICEF Indonesia 2023 data showing the dominance of children's internet use for socializing and entertainment, along with limited information on online safety (UNICEF Indonesia, 2025). Parental support might vary according to digital literacy and self-efficacy (Shin & Lwin, 2022).

Further, initial observations found litter inside and around classrooms, as well as some students who did not consistently use trash bins; such behavior may also be influenced by social norms in the setting where the action occurs (Helferich et al., 2023). Another issue emerged from the school needs assessment, which indicated that students' communication and teamwork skills still required strengthening. These findings formed the basis for designing Fun Leadership Outbound, which provided group activities so that students had opportunities to communicate, divide roles, develop strategies, and coordinate in pursuit of a shared goal. However, the needs assessment did not provide sufficient evidence to state that students had low leadership capability. Therefore, the study does not position collaborative leadership as an initial weakness that must be corrected, but rather as behavior that can be observed when students engage in activities requiring coordination and influence among group members. This position is consistent with van Dalfsen et al. (2021), who view shared leadership as a process that emerges through interaction and member participation in group activities.

Social marketing was selected as the primary analytical lens because the study focuses on how a behavioral proposition is designed for a particular audience and how that proposition competes with other choices. Previous research shows that social marketing has moved from a dominant focus on communication toward the management of behavioral change through marketing principles (Dietrich et al., 2022). The CBE framework positions audience insight and value as foundations for design, while CSD-IES connects consumer research, segmentation, and implementation in program planning (Rundle-Thiele et al., 2021; Akbar et al., 2021). Value is related to exchange because audiences expend time and effort or relinquish other activities when choosing a particular behavior (Santos et al., 2021). That choice also faces competition from behaviors that are more familiar or provide faster benefits (Raciti, 2021). Audience differences make segmentation relevant so that a proposition is not assumed to be equally suitable for all participants (Carins et al., 2022). However, the application of these principles has not been consistent across previously reported interventions (Schmidtke et al., 2021a; Ryan et al., 2022). Accordingly, the three school programs are examined as behavioral interventions through a social marketing-informed lens rather than treated as complete social marketing interventions. This positioning is deliberately cautious because exchange, competition, and segmentation were not all formally designed

from the outset; instead, these concepts are used to examine audience needs, behavioral alternatives, value-related considerations, and the form of offering that enables action to occur.

However, a behavioral proposition that has been designed is not always enacted under conditions identical to the initial assumptions. Co-design can help develop an understanding of audience needs before a program begins (Schmidtke et al., 2021b), but participant variation and field constraints may only become fully visible during implementation. Holtrop et al. (2022) show that adaptations need to be analyzed in terms of what changes, who makes the decision, and why the change is made. At this point, social marketing and an implementation perspective perform different but connected functions. Social marketing explains what behavior is offered, to whom it is offered, and which value and behavioral competition should be considered; the implementation perspective explains what occurs when that proposition encounters participant capabilities and field conditions. Adaptive facilitation can connect the two when facilitators adjust delivery or support without changing the behavioral objective. This process is also influenced by stakeholders. Stakeholder interactions can support or hinder the intended practice (Roemer et al., 2021), while social support and partnerships determine the availability of resources and reinforcement surrounding the audience (Baptista et al., 2021; Duane et al., 2022). Among children, parental roles in technology use (Shin & Lwin, 2022) and group norms in environmental behavior (Helferich et al., 2023) show that enactment occurs within a social environment rather than through isolated individual decisions.

Two fundamental theoretical issues emerge from this discussion. Previous research provides substantial evidence regarding outcomes, but offers less explanation of how a behavioral proposition moves from design into participant experience, gains an opportunity to be attempted, and then appears as initial behavioral enactment under real implementation conditions (Getachew-Smith et al., 2022; van de Wetering et al., 2022). Principles concerning value, competition, and segmentation are available, but they do not fully explain how implementers respond to audience heterogeneity while a program is being delivered (Rundle-Thiele et al., 2021; Carins et al., 2022; Holtrop et al., 2022). Colquhoun et al. (2025) illustrate this gap through a scoping review that identified 28 controlled studies at the intersection of social marketing and implementation science, all within the health domain. Another issue concerns digital, environmental, and collaborative behavior, which have developed within separate literature streams (Shin & Lwin, 2022; Helferich et al., 2023; van Dalfsen et al., 2021). This separation creates a theoretical problem because it remains unclear whether similar intervention principles generate the same enactment process when behaviors differ in observability, resource requirements, speed of feedback, and level of dependence on other people.

This study addresses both gaps through three embedded intervention units within the same institutional case, without assuming identical target-audience composition. Smart Learning Digital Entrepreneur involved 64 students in grades V–VI, Green Heroes Movement involved 188 students in grades I–VI, and Fun Leadership Outbound involved 192 students in grades I–VI. Activity structure, participant numbers, level of physical activity, facilitation requirements, and form of feedback also differed across units. The shared school environment therefore provides a relatively consistent comparative context, while differences in participant composition and modality are treated as analytical conditions that may influence enactment rather than as factors assumed to be absent. The study uses an interpretive approach with within-unit analysis and cross-unit comparison to trace relationships among intervention design, participant experience, adaptive implementation, and initial behavioral enactment. Accordingly, the study asks how intervention design moves toward initial behavioral enactment across digital, environmental, and collaborative behavioral targets, and how audience heterogeneity and implementation conditions shape that process. Its novelty lies in comparative process analysis of behavioral targets with different enactment requirements within a single institutional environment. The study does not test causal effectiveness and does not equate behavior observed during activities with sustained behavioral change.

Literature Review

Social Marketing and Behavioral Enactment

Social marketing is concerned with behavioral choice rather than communication exposure alone. Its distinctive contribution is to apply marketing logic to the specification of a behavioral objective, the understanding of a target audience, and the design of an offering that can compete with existing alternatives (Andreasen, 2002). Contemporary scholarship has extended this behavioral orientation

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beyond message dissemination toward the design and management of behavioral solutions (Dietrich et al., 2022). However, social marketing principles are not implemented uniformly, and benchmark-based assessments have long been used to distinguish social marketing practice from more general communication or behavior-change activity (Wettstein & Suggs, 2016). Reviews across low- and middle-income countries and Pacific Island populations report uneven use of segmentation, exchange, competition, and theory (Schmidtke et al., 2021a; Ryan et al., 2022). Riedel et al. (2022) similarly identify limited use of exchange and competition, while Sommariva et al. (2025) show stronger but still variable benchmark incorporation in more recent interventions. These findings suggest that the value of social marketing principles lies less in checklist compliance than in the behavioral decisions they inform. Planning frameworks such as CSD-IES and Co-create-Build-Engage reinforce this view by connecting audience understanding with value creation, behavioral design, and implementation (Akbar et al., 2021; Rundle-Thiele et al., 2021).

Audience orientation requires attention to why an existing behavior remains attractive. A socially desirable option may demand more effort, time, or capability than a familiar alternative. Co-design can improve formative understanding by incorporating intended audiences before delivery (Schmidtke et al., 2021b). Within this logic, value concerns benefits perceived from performing a behavior, exchange concerns what participants expend or relinquish relative to those benefits, while behavioral competition refers to alternatives offering competing value. Value may be realized through participation rather than simply supplied by an intervention provider (Santos et al., 2021), whereas competing behaviors may remain attractive because they are habitual, convenient, or immediately rewarding (Raciti, 2021). These concepts are relevant insofar as they help explain whether a behavioral proposition becomes sufficiently meaningful and feasible to be attempted.

Behavioral evidence itself exists at different levels. Knowledge indicates understanding, intention denotes willingness, participation reflects engagement with an intervention, and enactment requires performance of the targeted action. Repetition requires evidence across subsequent opportunities, while sustained behavior demands stronger temporal evidence. Research on the intention–behavior gap shows that willingness does not reliably result in action when capability, opportunity, self-regulation, or situational conditions constrain performance (Rhodes et al., 2022; Conner & Norman, 2022). Environmental intervention research provides a similar caution: positive changes may occur across knowledge, attitudes, intentions, and behavior, yet behavioral evidence remains frequently self-reported and heterogeneous (van de Wetering et al., 2022). The theoretical issue is therefore not simply whether audiences understand or accept a behavioral proposition, but whether the intervention creates conditions under which the behavior becomes enactable.

Audience Heterogeneity and Adaptive Implementation

Enactability depends partly on audience heterogeneity. Segmentation becomes useful when differences among participants are meaningful for intervention strategy rather than merely demographic. Relevant variation may involve existing behavior, prior familiarity, comprehension, confidence, motivation, perceived barriers, social influence, or resource access. Empirical segmentation research demonstrates that people facing a similar behavioral issue can exhibit distinct behavioral profiles (Arli et al., 2021), although segmentation remains underused in social marketing practice (Carins et al., 2022). Its managerial value therefore depends on whether identified differences alter targeting, task design, facilitation, or resource allocation. This creates a trade-off between analytical precision and operational usability (Ibrahim et al., 2022). Age can provide a practical segmentation variable in interventions involving children, but it does not fully capture differences in familiarity, comprehension, confidence, or support needs.

A more important distinction concerns planned segmentation and adaptation during delivery. Planned segmentation uses information available ex ante to differentiate intervention strategy, whereas adaptation responds to mismatches that become visible after implementation begins. Co-design can reduce uncertainty before delivery (Schmidtke et al., 2021b), but not every difference can be anticipated. Implementation research consequently treats adaptation as a response to variation in participants, resources, and settings (Holtrop et al., 2022; Strehlenert et al., 2024). Implementation playbooks similarly show that delivery strategies may change while preserving the intervention's central objective (Yakovchenko et al., 2023). This relationship suggests that residual heterogeneity after initial segmentation may increase reliance on adaptive facilitation during implementation. The growing

intersection between social marketing and implementation science strengthens this argument by linking audience value and behavioral design with decisions made under real-world delivery conditions (Colquhoun et al., 2025).

Structural Enactment Properties and Continuity Conditions

Behavioral targets differ in the conditions required for enactment. Six properties are particularly relevant for comparison: actionability, tangibility, observability, resource dependence, social interdependence, and immediacy of feedback. Actionability concerns how readily a target behavior can be performed once an opportunity is provided. Tangibility concerns whether performance produces a concrete artifact or physical outcome, whereas observability concerns whether the action itself can be directly seen or recognized. Resource dependence refers to the material, technical, or social resources needed for performance. Social interdependence captures whether enactment depends on coordinated action with other people, while feedback immediacy concerns how quickly participants can observe the consequences of what they do. These dimensions shift analysis away from broad domain labels toward the structural conditions that make behavioral performance possible.

The behavioral domains examined in this study illustrate different configurations of these properties. Productive digital behavior may depend on device access, digital capability, and adult mediation while competing with alternative uses of the same device that provide more immediate rewards (Shin & Lwin, 2022). Environmental actions such as waste disposal can be directly observable and performed with comparatively limited technical resources, although opportunities for repetition remain connected to facilities, routines, and social norms (van de Wetering et al., 2022; Helferich et al., 2023). Collaborative behavior has a different enactment structure because coordination cannot be performed independently of other participants. Research on shared leadership therefore locates leadership in interaction, influence, coordination, and participation in group decision-making rather than treating it solely as an individual attribute (van Dalfsen et al., 2021). Practice-oriented social marketing likewise cautions against separating behavior from the practices and settings through which performance becomes possible (Spotswood et al., 2021). The theoretically relevant comparison is therefore not simply between digital, environmental, and leadership domains, but between behavioral targets with different enactment requirements.

Opportunities for reenactment also depend on social, material, and organizational conditions surrounding the audience. Stakeholders may provide opportunities for practice, model expected behavior, reinforce performance, provide access to resources, or maintain behavioral expectations. Stakeholder and partnership research indicates that intervention providers rarely control all conditions required to support a behavior (McHugh et al., 2018; Duane et al., 2022), while social support can influence behavioral choice through encouragement and reinforcement (Baptista et al., 2021). Social norms are likewise associated with pro-environmental behavior (Helferich et al., 2023). In child-focused settings, parents can shape access to digital resources and mediation practices (Shin & Lwin, 2022), while adults may provide observable behavioral models (Liang et al., 2022). These functions do not imply that behavioral continuity has occurred. Rather, they indicate whether opportunities for reenactment remain available after facilitated activity ends. Continuity conditions are therefore likely to vary according to the resource and social requirements of the target behavior.

Theoretical Synthesis and Research Gap

The literature provides well-developed principles for specifying behavioral objectives, understanding audiences, considering value and behavioral alternatives, and differentiating audience groups. It provides less explanation of how a designed behavioral proposition becomes enactable when it encounters heterogeneous participants and real implementation constraints. Uneven benchmark application is well documented (Dietrich et al., 2022; Ryan et al., 2022; Sommariva et al., 2025), yet identifying whether segmentation, exchange, or competition is present provides limited explanation of how those principles operate during delivery (Schmidtke et al., 2021a; Riedel et al., 2022). The emerging interface between social marketing and implementation science makes this limitation more visible (Colquhoun et al., 2025). The unresolved theoretical problem is therefore a design-to-enactment gap: social marketing specifies what should inform the design of a behavioral proposition more clearly than it explains how that proposition becomes performable, requires adaptation, or fails to progress toward enactment under implementation conditions.

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A second gap concerns variation in enactment requirements across behavioral targets. Digital, environmental, and collaborative behaviors have largely developed within separate research streams. As a result, existing literature provides less explanation of whether similar intervention principles operate in comparable ways when behavioral targets differ in actionability, tangibility, observability, resource dependence, social interdependence, and feedback immediacy. The purpose of cross-behavioral comparison is therefore not to assume that domain membership causes differences in participant response, but to examine how structural enactment properties are associated with the movement from behavioral proposition to initial action.

METHODS

The study adopts an interpretivist paradigm and a temporally structured single embedded qualitative case study design. The case comprises a series of behavioral interventions within the PkM program at SD Negeri 8 Jambewangi, while Smart Learning Digital Entrepreneur, Green Heroes Movement, and Fun Leadership Outbound constitute three embedded intervention units. The three units were situated within the same institutional environment and implementation team, but differed in behavioral targets, participant composition, and activity format. Each unit was first examined through within-unit analysis and subsequently compared through cross-unit comparison to identify similarities and differences in the process. The comparison was theoretical and was not used to isolate the effect of the behavioral domain. A case study design was selected because it enables managerial processes to be examined in real-world settings and supports the development of theoretical explanations from empirical evidence (Eisenhardt, 1989; Welch et al., 2011). One researcher was also involved in the implementation team, so the researcher–implementer position was explicitly addressed in the design because it provided access to program processes while also potentially influencing observation, interpretation, and participant responses.

The temporal structure of the study covered the pre-intervention phase, implementation, immediate post-intervention, and early follow-up. The initial phase included needs identification, program planning, and activity preparation. Smart Learning Digital Entrepreneur was implemented on 20 July 2026, Green Heroes Movement on 24 July 2026, and Fun Leadership Outbound on 24–25 July 2026. Early follow-up was conducted 6–8 days after the final intervention to trace forms of early reinforcement and opportunities to reenact the targeted behavior. The temporal structure was used to distinguish pre-program conditions, responses during implementation, initial behavioral enactment, and early post-activity conditions. The data were not used to infer repetition, discontinuation, or sustained behavior because the observation period was not sufficiently long. Process analysis followed Langley (1999), while abductive reasoning was undertaken through systematic combining by moving between field evidence, social marketing concepts, and alternative explanations (Dubois & Gadde, 2002). The three embedded units were examined using the same analytical dimensions to reduce the possibility that apparent differences reflected inconsistent analytical attention across programs rather than differences in the observed process.

Table 1. Characteristics of Embedded Intervention Units and Analytical Dimensions

Embedded intervention unit	***Behavioral target***	***Main intervention form***	***Common analytical dimensions***
Smart Learning Digital Entrepreneur	Safe and productive use of technology	Digital education, discussion, and technology-based productive practice	*Audience insight; value/exchange; competition; segmentation; enactment opportunity; social reinforcement; adaptation; continuity conditions*
Green Heroes Movement	Practice of maintaining cleanliness in the school environment	Environmental education and direct clean-up action	Same analytical dimensions

Embedded intervention unit	*Behavioral target*	*Main intervention form*	*Common analytical dimensions*
Fun Leadership Outbound	Teamwork, communication, sportsmanship, and collaborative leadership	Group games and competition	Same analytical dimensions

Source: Processed research data (2026).

Social marketing concepts were used as sensitizing concepts, particularly behavioral objective, audience insight, value/exchange, behavioral competition, and segmentation/adaptation. These concepts directed analytical attention without predetermining the categories of findings (Andreasen, 2002; Dubois & Gadde, 2002). Planned segmentation was distinguished from adaptation during delivery. Segmentation used information available before implementation to identify audience variation, while adaptation occurred when differences in needs became visible during the activity. Age and grade level were used as practical indicators, but heterogeneity was also examined through prior familiarity, comprehension, confidence, need for adult guidance, and engagement responses. Within the digital unit, digital safety and productive or entrepreneurial use were treated as related but analytically distinct propositions because participants could understand one without necessarily understanding the other. Accordingly, the analysis assessed whether limitations in ex-ante segmentation were accompanied by greater need for ex-post adaptive facilitation.

Participants were selected through purposive sampling that combined criterion sampling and maximum variation sampling. The primary criterion was involvement in the design, implementation, receipt, or observation of one or more intervention units. The final dataset comprised 49 participants: 21 students, Eleven university implementers, six teachers, one principal, and 12 parents or guardians. Student selection considered grade level, programs attended, understanding of the activities, support needs, and variation in responses. The sample intentionally included participants who were active, passive, confused, required greater assistance, or expressed dissatisfaction so that interpretation was not constructed solely from positive responses. Sample adequacy was considered using the principle of information power, taking into account the relevance of participants' experience, quality of dialogue, and depth of information (Malterud et al., 2016). Of the 21 students, 12 participated in the digital program, 19 in Green Heroes Movement, and 20 in Fun Leadership Outbound. Because not all students participated in all three units, cross-unit comparison was not treated as a same-participant panel comparison.

Table 2. Distribution of Participants and Data Collection

Participant group	**N**	***Individual interviews***	**FGD**	***FGD participants***	***Early follow-up***
Students	21	9	3	12	8
University implementers	11	3	1	6	–
Teachers	6	1	1	5	3
Principal	1	1	–	–	1
Parents/guardians	12	6	1	6	6
Total	**51**	**20**	**6**	**29**	**18**

Source: Processed research data (2026).

Data were obtained through semi-structured interviews, FGDs, observations, program materials, student artifacts, audiovisual documentation, and reflective journals. Each source served a different triangulation function. Planning materials and logbooks were used to reconstruct the planned intervention; observations and audiovisual documentation were used to examine the delivered

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intervention; interviews and FGDs were used to understand the experienced intervention; while post-program interviews with teachers and parents were used to trace early reinforcement and continuity conditions. This arrangement allowed differences among what was planned, what implementers delivered, what participants experienced, and what was observed during the program to be examined systematically.

Data collection yielded 20 individual interviews and six FGDs. Student interviews lasted approximately 20–35 minutes, used age-appropriate language, and were supported by activity photographs, experience cards, or a before–during–after sequence. The three student FGDs each consisted of four participants and were grouped pragmatically by grade level. Interviews with university implementers focused on needs identification, behavioral objectives, design decisions, and adjustments during implementation. Teachers and the principal provided views on student responses and the possibility of providing practice opportunities after the program, while parents discussed behavior and support at home. Observation generated approximately 52 hours of data, comprising 14 hours of planning and preparation, 24 hours of implementation, eight hours of immediate post-intervention, and six hours of early follow-up. The researcher served as a participant observer because of involvement in the program team. Observation notes were not used as stand-alone evidence and were examined alongside other data sources.

All interviews and FGDs were recorded after consent was obtained, then transcribed verbatim, checked, anonymized, and coded by participant group and embedded unit. The analysis used Gioia-inspired abductive analysis because the study employed sensitizing concepts while allowing empirical categories that had not been anticipated to emerge. The Gioia approach was used to maintain the relationship between participant language and concept development (Gioia et al., 2013). The analysis proceeded in six stages. First, the chronology of each unit was reconstructed. Second, first-order coding was developed as closely as possible to participants' experiences. Third, codes were compared abductively to develop second-order themes. Fourth, temporal bracketing was used to connect design, implementation, engagement, and initial enactment (Langley, 1999). Fifth, cross-unit comparison was conducted using the same analytical dimensions. Sixth, interpretations were examined using negative cases and alternative explanations.

The analysis distinguished knowledge, intention, participation, initial enactment, repetition, and sustained behavior as different categories of evidence. Participation was not treated as enactment, while initial enactment was not considered evidence of behavior that persisted. Aggregate dimensions were also not predetermined before coding. The analytical process generated six dimensions that were used consistently in the results: behavioral reframing, experiential enactment, social activation, adaptive facilitation, conditions for continuity, and boundary conditions. Negative cases included limited engagement, difficulty understanding tasks, the need for intensive facilitation, fatigue, and negative responses to activities. This approach helped reduce the risk that dominant patterns would be constructed solely from participants who responded positively to the program.

Research quality was maintained through triangulation, an audit trail, reflective journals, peer debriefing, member reflection, and negative case analysis (Tracy, 2010). The audit trail included program designs, field notes, transcripts, coding changes, and analytic memos. Reflective journals were used to assess the influence of the researcher–implementer position on interpretation. Peer debriefing was conducted during coding development and cross-unit interpretation, while member reflection was used to check the accuracy of process reconstruction with implementers and school representatives. An interviewer who was not the primary facilitator was used when a direct relationship with participants could potentially increase social desirability. The study obtained ethical approval and school permission. Adult participants provided informed consent, while students participated after parental/guardian consent and child assent. Participant identities were anonymized, and the use of visual documentation required specific permission, consistent with principles for research involving children (Mishna et al., 2004; Phelan & Kinsella, 2013). Reporting was informed by SRQR and COREQ (O'Brien et al., 2014; Tong et al., 2007).

RESULTS AND DISCUSSION

The analysis covered three embedded intervention units: Smart Learning Digital Entrepreneur, Green Heroes Movement, and Fun Leadership Outbound. The dataset comprised 21 students, eleven

university implementers, six teachers, one principal, 12 parents/guardians, 52 hours of observation, program materials, student artifacts, reflective journals, photographs, and videos. Of the 21 students in the qualitative sample, 12 participated in the digital intervention, 19 in Green Heroes Movement, and 20 in Fun Leadership Outbound; some students participated in more than one program.

Social marketing sensitizing concepts were most visible in reconstructing the intervention proposition rather than as stand-alone aggregate dimensions. Audience insight was reflected in the needs assessment, behavioral competition was clearest in the digital unit where entertainment-oriented device use remained a familiar alternative, and planned segmentation was operationalized pragmatically through grade level. Value/exchange was interpreted cautiously because participant accounts did not provide consistent evidence of explicit trade-offs across all three units. Consequently, these concepts informed the analysis without being forced into the final thematic structure.

Table 3. Abductive Thematic Structure

Empirical indicators	***Second-order themes***	***Aggregate dimensions***
Devices were more frequently mentioned for playing and watching; use for learning or promotion appeared less often in initial accounts	Entertainment-oriented digital meaning	Behavioral *reframing*
Students began to mention learning, posters, promotion, and content creation as alternative uses of devices	Emerging productive digital meaning	Behavioral *reframing*
Digital safety messages were easier to explain again than the concept of entrepreneurship	Uneven *reframing* across digital *proposition*s	Behavioral *reframing*
Posters, captions, and photo concepts were created during facilitated tasks	Prompted productive digital *practice*	Experiential *enactment*
Students picked up litter after the explanation session and clean-up instructions	Prompted *environmental enactment*	Experiential *enactment*
Experiences of cleaning the school were easier to recount than waste classification	Action-centered *enactment*	Experiential *enactment*
Students observed peers' actions and followed their example during the clean-up activity	Peer *modeling*	Social activation
Students reminded one another during the cleanliness activity	Peer *reinforcement*	Social activation
Group members arranged positions, gave cues, and adjusted strategy	Interdependent *coordination*	Social activation
The role of giving direction shifted among participants according to the situation	Emergent situational influence	Social activation
Instructions were simplified or repeated when students had difficulty understanding the activity	Comprehension-sensitive *adaptation*	Adaptive facilitation
Technical assistance was increased when participants had difficulty producing digital artifacts	Capability-sensitive *scaffolding*	Adaptive facilitation
Schedules, groups, and activity arrangements were adjusted to participant numbers and grade levels	Logistical *adaptation*	Adaptive facilitation
Teachers repeated messages and provided opportunities to use Canva after the program	School-based re*enactment* opportunities	Conditions for continuity
Parents restricted device use time and some provided alternatives for productive use	Family-mediated digital support	Conditions for continuity
Cleanliness messages could be incorporated into school routines	Routine-based *reinforcement*	Conditions for continuity

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Empirical indicators	***Second-order themes***	***Aggregate dimensions***
Lengthy explanations reduced attention and entrepreneurship was difficult for some participants to understand	Cognitive and attention constraints	Boundary conditions
Younger students required closer assistance and some experienced fatigue	Capability and *endurance* constraints	Boundary conditions
Losing generated disappointment and withdrawal among some participants	Unintended affective responses	Boundary conditions

Source: Processed research data (2026).

Abductive thematic analysis with Gioia-inspired coding principles generated six aggregate dimensions: behavioral reframing, experiential enactment, social activation, adaptive facilitation, conditions for continuity, and boundary conditions. These six dimensions were not treated as linear stages, but were used to explain how opportunities for enactment emerged, were constrained, received social support, or required adjustment during implementation.

Emerging Reframing and Prompted Productive Practice

Smart Learning Digital Entrepreneur was implemented on 20 July 2026 with 64 students in grades V–VI. The finding that device use was frequently associated with entertainment was derived from the pre-intervention needs assessment, initial notes, and accounts from teachers, university implementers, and students. The study did not systematically measure the frequency or duration of device use. One grade V student explained:

> *"When I use my phone, I usually play games and watch YouTube. I mostly use it for studying only when my teacher gives me an assignment."*

This account illustrates entertainment-oriented use among a particular participant and was not used to generalize to all students. Some students also lived with their grandparents while their parents worked away from home. This condition was treated as variation in the support environment rather than as a general explanation for patterns of digital use. After the program, student accounts showed the emergence of alternative meanings attached to digital devices. One grade VI student said:

> *"I only just found out that a phone can also be used to make posters for selling things. I usually only watch videos. It turns out you can make pictures and write product descriptions too."*

However, this reframing did not emerge uniformly. Four of the 12 students in the digital sample still had difficulty explaining the relationship between social media and entrepreneurship. One student stated:

> *"I understand that I shouldn't give my password to other people. But I'm still confused about selling through social media because I've never done that before."*

University implementers also observed that digital safety messages were understood more quickly, whereas entrepreneurship required repeated examples of products and captions. The practice segment produced 18 digital posters, seven caption drafts, and five product photo concepts. Because artifact records did not consistently distinguish individual from group outputs, these figures were treated as program outputs. Four groups required assistance when selecting images or composing promotional phrases. Participant attention also declined after approximately 15 minutes of the explanatory segment, while three students requested more practice time. These findings indicate emerging reframing of digital technology beyond entertainment and prompted productive practice. Reframing did not always progress to independent practice because some participants continued to face comprehension and capability gaps.

Prompted Enactment and Enactment Immediacy

Green Heroes Movement was implemented on 24 July 2026 after initial observations found litter inside and around classrooms and some students who did not consistently use trash bins. The program involved 188 students in grades I–VI, but this figure only indicates program coverage. Qualitative inference was based on interviews and observations of participants within the research dataset. After an explanation of cleanliness and waste types, students took part in a clean-up activity around the school environment.

Student accounts showed that experiences of performing an action were easier to reconstruct than the classification material. One grade III student said:

"What I remember most is looking for trash with my friends. I found some plastic near the classroom and then threw it in the trash bin."

By contrast, one grade II student explained,

"I forgot the names of the types of waste. Leaves and plastic are different, but I forgot which category they go into."

This contrast was not used to claim that practice was generally more effective. The findings show that the clean-up activity produced enactment evidence that could be directly observed, while understanding waste classification required a different form of evidence. Audience variation became more visible during delivery. In the observed activity segments, students in grades III–VI generally followed task allocation more readily, whereas younger students in grades I–II more often required demonstrations, repeated instructions, and closer assistance. One grade I–II student explained:

"I'm tired. I was confused about what I was supposed to clean, and then an older student helped me."

Two grade I–II students did not complete the entire sequence of activities. Facilitators responded by simplifying instructions and providing direct examples. Picking up litter was therefore categorized as prompted initial enactment rather than as an internalized sense of responsibility. In this case, environmental action was interpreted as having greater enactment immediacy because the action could be performed immediately after instruction and its physical consequences were directly visible. The term represents a qualitative interpretation rather than a comparative measure.

Collaborative Coordination and Emergent Situational Influence

Fun Leadership Outbound was conducted on 24–25 July 2026 with 192 students in grades I–VI. Leadership analysis focused on tug-of-war episodes, while the coloring competition was not used as primary evidence. Observations showed that some students arranged member positions, determined cues, proposed changes in strategy, and encouraged the group. The directing role was also not always performed by the same student, but shifted according to situational needs. One student explained:

"In tug-of-war, you have to listen to your friend's cue; if you do not pull together, you will definitely lose."

Across subsequent rounds, groups were also observed changing the way they pulled after the initial strategy did not work. This pattern provides stronger evidence of collaborative coordination, distributed influence, and emergent collaborative leadership behaviors than of stable leadership development. However, the competitive activity structure did not always generate positive responses. Some students showed disappointment after their group lost, and some withdrew from the closing activity. Facilitators then broadened recognition to all participants and re-emphasized participation and sportsmanship. These findings show that the same activity structure can provide opportunities for coordination while also generating withdrawal among some participants. This negative case limits the interpretation that competition automatically strengthens engagement or collaborative behavior.

Adult Reinforcement and Behavior-Specific Continuity Conditions

Early follow-up was conducted 6–8 days after the final intervention and was used to trace early reenactment opportunities rather than behavioral continuity. Teachers contributing to the early-follow-up data stated that they had repeated messages concerning technology, cleanliness, or teamwork. Two teachers also assigned simple visual tasks using Canva. One teacher explained that some students still needed assistance from peers when using the application. This episode indicates an opportunity for reenactment of productive technology use, but does not yet show a pattern of independently repeated behavior.

Forms of reinforcement differed by behavioral target. Cleanliness messages were more readily connected to classroom duty routines and reminders after break time, while collaborative behavior depended on the availability of further group activities requiring role allocation and coordination. Parent data primarily explained digital behavior. Across the parent dataset, nine of the 12 parents reported restricting the duration of device use, and four within that group also described guiding children toward productive use. Some parents reported that limiting duration was easier than providing digital alternatives because their ability to use applications remained limited. This pattern indicates unequal stakeholder relevance, with families playing a greater role in digital access and mediation, while teachers

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and school routines provided more direct opportunities for environmental action and collaborative behavior. Accordingly, early continuity conditions are behavior-specific and cannot be assumed to operate in the same way across all interventions.

Cross-Unit Findings

No identical measure of engagement was available across the three embedded units. Accordingly, the comparison did not use low, medium, or high ratings. The consistent pattern in the data was that segments providing opportunities for practice generated behavioral participation that was more readily observable than information-dominant segments.

Table 4. Comparison of Structural Enactment Properties Across Units

Structural enactment property	***Digital***	***Environmental***	***Collaborative coordination***
Actionability	Practice requires task comprehension and digital capability	Action can begin immediately after instruction	Action emerges when the group enters a shared task
Tangibility	The proposition becomes concrete through posters, captions, and product photographs	The result of the action is visible in changes to physical conditions	Results are visible through group performance and strategy
Observability	Artifacts and task behavior can be observed; everyday use is not observed	Litter-picking can be observed directly	Positioning, signaling, and coordination are visible in interactions
Social interdependence	Some tasks can be performed individually; peer assistance still emerges	Individual actions occur within a collective activity	Activity success depends directly on other members
Resource dependence	Devices, digital capability, time, and technical support	Cleaning facilities and supporting routines	Low material dependence, but requires a group
Immediacy of feedback	Feedback emerges through artifacts and facilitator responses	Physical consequences are immediately visible	The effects of coordination are immediately visible in the game
Main adaptation	Simplification and technical scaffolding	Repetition of instructions and assistance	Scheduling, grouping, and group management
Early continuity conditions	Teachers, parents, devices, and digital opportunities	Teachers, peer reminders, facilities, and school routines	Group tasks and repeated coordination opportunities
Boundary condition	Capability gaps can halt movement toward practice	Comprehension and endurance constrain enactment	Competitive structure can generate coordination or withdrawal

Source: Processed research data (2026).

Across the three units, these configurations can also be summarized as three modes of participation: productive creation in the digital unit, collective action in the environmental unit, and interdependent play in the collaborative unit. These labels describe how activity formats created different opportunities for enactment and are not treated as additional stages or constructs.

Cross-unit analysis shows that the enactment process is conditional. In the digital unit, students could begin to see alternative functions of digital devices, but reframing did not always become practice when technical skills remained limited. In the environmental unit, the behavioral proposition could be followed immediately by action because the task was directly actionable and observable; however, younger students showed that actionability still depended on comprehension and endurance. In the collaborative unit, social interdependence required members to adjust their actions to one another, making positioning, signaling, and strategy adjustment observable manifestations of coordination.

However, negative cases show that the same activity structure could also generate disappointment and withdrawal.

The comparison shows that cross-unit differences cannot be explained solely by the labels of digital, environmental, or collaborative domains. Actionability, tangibility, observability, resource dependence, social interdependence, immediacy of feedback, audience capability, and intervention modality help explain whether a behavioral proposition can be enacted immediately, requires scaffolding, or stops before enactment. Thus, the cross-unit findings shift the analysis from a comparison of three programs toward an interpretation of the structural enactment properties associated with variation in the design-to-enactment process.

Discussion

The findings show that differences across units cannot be attributed solely to the behavioral domain. Smart Learning Digital Entrepreneur contained a larger explanatory component, whereas Green Heroes Movement and tug-of-war were more action-based from the outset. The decline in attention in the digital program may have been influenced by modality, while the rapidity of litter-picking was also related to a task design that was directly actionable. The evidence is therefore best interpreted as showing that behavioral enactment emerges through an interaction between structural enactment requirements and intervention modality. This position remains consistent with social marketing, which treats behavior as the target rather than communication exposure (Andreasen, 2002; Ryan et al., 2022).

Types of enactment also need to be distinguished. Picking up litter, creating posters, or coordinating during a game demonstrates action consistent with the target, but most of these actions occurred under program direction. The data therefore primarily show prompted enactment. Self-initiated enactment requires choice without direct instruction, repeated enactment requires evidence on subsequent opportunities, and sustained behavior requires stronger temporal evidence. This distinction prevents participation or enthusiasm from being treated as behavioral change. The findings of van de Wetering et al. (2022) regarding limitations in self-reported behavioral measurement reinforce this caution.

The three programs are more appropriately described as school-based behavioral interventions analyzed through a social marketing-informed lens. Principles such as behavioral objectives and attention to student needs were evident in planning, but exchange, behavioral competition, and segmentation were not formally specified as ex-ante benchmarks. Social marketing was therefore used primarily as a retrospective analytical lens for examining the design and implementation process. This positioning is consistent with the variation in benchmark use identified by Ryan et al. (2022) and avoids claiming that the programs constituted complete social marketing applications from the outset.

The segmentation and adaptation findings provide a more specific contribution. Age functioned as a practical segmentation variable, but did not fully capture differences in familiarity, comprehension, confidence, and support needs. When such variation became visible only during delivery, facilitators simplified language, repeated instructions, and increased support. Thus, planned segmentation structured the intervention before delivery, while adaptive facilitation became a real-time response when initial segmentation did not sufficiently capture audience heterogeneity. The data support the proposition that greater unanticipated heterogeneity is associated with greater reliance on adaptive facilitation. Variation in participant experiences within group interventions has also been reported by Ho et al. (2023).

The three forms of participation—productive creation, collective action, and interdependent play—are better understood as modes of participation rather than additional stages. Their analytical relevance lies in the enactment properties they make visible. Productive creation increases tangibility because productive digital use produces artifacts; collective action combines high actionability with directly observable physical feedback; and interdependent play has high social interdependence because success depends on coordination. The findings of Sieg and Dreesmann (2021) support the relevance of direct experience in environmental activities, but the present comparison indicates that direct participation operates differently according to actionability, tangibility, observability, resource dependence, social interdependence, and immediacy of feedback.

Social activation also needs to be differentiated. Modeling occurs when participants observe the actions of others; descriptive norms concern what the group does; injunctive expectations indicate behavior perceived as expected; coordination involves interdependent joint action; while reinforcement

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emerges through reminders, encouragement, or appreciation. Liang et al. (2022) show that adult modeling can influence children's pro-environmental behavior, meaning that peers and adults cannot be treated as identical sources of influence.

Two meanings of competition must also be distinguished. Behavioral competition in social marketing refers to alternatives that compete with the target behavior, such as entertainment-oriented gadget use versus productive use. By contrast, tug-of-war uses a competitive activity structure as the intervention setting. This structure can generate coordination but can also produce disappointment after losing. Ho et al. (2023) help show that participant experiences in group activities are not always uniform.

Finally, continuity requirements differ according to resource dependence. Digital behavior requires devices, time, adult capability, and family mediation; Shin and Lwin (2022) show that parental mediation is related to parents' digital literacy and self-efficacy. Environmental behavior can be linked more readily to school routines and facilities, whereas collaborative coordination requires recurring opportunities for group tasks. These findings point to continuity conditions: the social, material, and organizational conditions through which initial enactment can gain opportunities to be performed again. The term is used as an analytical descriptor rather than as a new construct. The data do not yet demonstrate sustained change, but they suggest that behaviors with higher external-resource dependence may require stronger continuity conditions.

CONCLUSION

The study shows that three school-based behavioral interventions analyzed through a social marketing-informed lens displayed different patterns of initial behavioral enactment according to the characteristics of the behavioral target and the form of activity used. Smart Learning Digital Entrepreneur primarily showed behavioral reframing of device use accompanied by prompted digital practice; Green Heroes Movement showed prompted environmental enactment through directly observable cleanliness actions; and Fun Leadership Outbound provided opportunities for collaborative coordination through interdependent group activities. Cross-unit analysis generated six aggregate dimensions: behavioral reframing, experiential enactment, social activation, adaptive facilitation, conditions for continuity, and boundary conditions. These dimensions do not form stages that always unfold linearly. Reframing may stop before practice when participants face capability limitations, enactment may require direct guidance, and social activities may generate coordination alongside negative responses. Adaptive facilitation becomes especially relevant when participant differences that were not fully anticipated in the design emerge during implementation.

The contribution of the study lies in clarifying how structural characteristics of behavioral targets are associated with opportunities for action during an intervention. In the digital intervention, productive creation made productive technology use tangible through artifacts but still depended on task comprehension and digital capability. In the environmental intervention, collective action was highly actionable and readily observable, with physical outcomes visible immediately. In the collaborative intervention, interdependent play made group performance directly dependent on coordination among members. These three forms are understood as modes of participation, while their differences are interpreted through six properties: actionability, tangibility, observability, resource dependence, social interdependence, and immediacy of feedback. The study also clarifies the relationship between planned segmentation and adaptive facilitation: audience heterogeneity not captured before the activity may increase the need for adjustment during program implementation. However, participation and enthusiasm are not treated as behavioral change. Most of the observed actions constituted prompted enactment within facilitated situations and therefore cannot yet be equated with self-initiated, repeated, or sustained behavior.

In practical terms, the digital program requires a greater proportion of practice and support aligned with participants' digital capabilities. Environmental activities can be differentiated according to support needs, while collaborative activities need to provide clearer opportunities for role allocation, decision-making, and reflection after the activity. Opportunities to perform the behavior again also depend on continuity conditions in the form of social support, material resources, and organizational routines. These findings should be read within the limitations of the study. The study was conducted in a single school with a short follow-up period. Participant composition and intervention modality were not equivalent across units, so cross-unit differences cannot be attributed solely to the behavioral domain.

Researcher involvement in the program also introduced risks of interpretive bias and social desirability, while stakeholder data were uneven because parent information primarily explained digital behavior. In addition, social marketing principles were not all formally applied from the design stage and were primarily used as a retrospective analytical lens. Within these limitations, the study offers a process-based account of movement from design to initial enactment and of conditions that may support opportunities for reenactment, without concluding that behavioral change persisted over the long term.

REFERENCES

Akbar, M. B., Ndupu, L. B., French, J., & Lawson, A. (2021). Social marketing: Advancing a new planning framework to guide programmes. RAUSP Management Journal, 56(3), 266–281. https://doi.org/10.1108/RAUSP-08-2020-0186

Andreasen, A. R. (2002). Marketing social marketing in the social change marketplace. Journal of Public Policy & Marketing, 21(1), 3–13. https://doi.org/10.1509/jppm.21.1.3.17602

Arli, D., Ang, T., & Wei, S. (2021). Why are some people not socially distancing during COVID-19? A segmentation study. Journal of Social Marketing, 11(2), 65–81. https://doi.org/10.1108/JSOCM-10-2020-0192

Baptista, N., Alves, H., & Pinho, J. (2021). The case for social support in social marketing. RAUSP Management Journal, 56(3), 295–313. https://doi.org/10.1108/RAUSP-08-2020-0193

Carins, J., Kitunen, A., & Rundle-Thiele, S. (2022). When less is more: A short-form tool to increase segmentation implementation. Social Marketing Quarterly, 28(3), 191–207. https://doi.org/10.1177/15245004221116082

Colquhoun, H., Ellen, M. E., Brehaut, J., Weinreich, N. K., Morvinski, C., Zarshenas, S., Nguyen, T., Presseau, J., McCleary, N., Shepherd, H. A., Dabbagh, A., & Proctor, E. (2025). Applications of social marketing for implementation science: A scoping review. Implementation Science, 20(1), Article 52. https://doi.org/10.1186/s13012-025-01458-z

Conner, M., & Norman, P. (2022). Understanding the intention-behavior gap: The role of intention strength. Frontiers in Psychology, 13, 923464. https://doi.org/10.3389/fpsyg.2022.923464

Dietrich, T., Hurley, E., Carins, J., Kassirer, J., Rundle-Thiele, S., Palmatier, R. W., Merritt, R. K., Weaven, S. K., & Lee, N. (2022). 50 years of social marketing: Seeding solutions for the future. European Journal of Marketing, 56(5), 1434–1463. https://doi.org/10.1108/EJM-06-2021-0447

Duane, S., Domegan, C., & Bunting, B. (2022). Partnering for UN SDG #17: A social marketing partnership model to scale up and accelerate change. Journal of Social Marketing, 12(1), 49–75. https://doi.org/10.1108/JSOCM-10-2020-0200

Dubois, A., & Gadde, L.-E. (2002). Systematic combining: An abductive approach to case research. Journal of Business Research, 55(7), 553–560. https://doi.org/10.1016/S0148-2963(00)00195-8

Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review, 14(4), 532–550. https://doi.org/10.5465/AMR.1989.4308385

Getachew-Smith, H., King, A. J., Marshall, C., & Scherr, C. L. (2022). Process evaluation in health communication media campaigns: A systematic review. American Journal of Health Promotion, 36(2), 367–378. https://doi.org/10.1177/08901171211052279

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. Organizational Research Methods, 16(1), 15–31. https://doi.org/10.1177/1094428112452151

Helferich, M., Thøgersen, J., & Bergquist, M. (2023). Direct and mediated impacts of social norms on pro-environmental behavior. Global Environmental Change, 80, 102680. https://doi.org/10.1016/j.gloenvcha.2023.102680

Ho, L. C., Bierman, K. L., Jacobson, L. N., Welsh, J. A., Hall, C. M., & Lee, D. L. (2023). Linking intervention experiences to child outcomes in a school-based social skills training program. Psychology in the Schools, 60(6), 1855–1876. https://doi.org/10.1002/pits.22840

Holtrop, J. S., Gurfinkel, D., Nederveld, A., Phimphasone-Brady, P., Hosokawa, P., Rubinson, C., Waxmonsky, J. A., & Kwan, B. M. (2022). Methods for capturing and analyzing adaptations: Implications for implementation research. Implementation Science, 17(1), Article 51. https://doi.org/10.1186/s13012-022-01218-3

ISSN 2963-7856 (print), ISSN 2961-9890 (online)

Ibrahim, A., Rundle-Thiele, S., Knox, K., & Almestarihi, R. (2022). The relative merit of two segmentation approaches: Executives views and a cost-benefit analysis. Journal of Social Marketing, 12(4), 607–622. https://doi.org/10.1108/JSOCM-01-2022-0026

Langley, A. (1999). Strategies for theorizing from process data. Academy of Management Review, 24(4), 691–710. https://doi.org/10.5465/AMR.1999.2553248

Liang, M., Chen, Q., & Zhou, Y. (2022). The influence of various role models on children's pro-environmental behaviours. Frontiers in Psychology, 13, 873078. https://doi.org/10.3389/fpsyg.2022.873078

Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. Qualitative Health Research, 26(13), 1753–1760. https://doi.org/10.1177/1049732315617444

McHugh, P., Domegan, C., & Duane, S. (2018). Protocols for stakeholder participation in social marketing systems. Social Marketing Quarterly, 24(3), 164–193. https://doi.org/10.1177/1524500418761626

Mishna, F., Antle, B. J., & Regehr, C. (2004). Tapping the perspectives of children: Emerging ethical issues in qualitative research. Qualitative Social Work, 3(4), 449–468. https://doi.org/10.1177/1473325004048025

O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for reporting qualitative research: A synthesis of recommendations. Academic Medicine, 89(9), 1245–1251. https://doi.org/10.1097/ACM.0000000000000388

Phelan, S. K., & Kinsella, E. A. (2013). Picture this: Safety, dignity, and voice—Ethical research with children. Qualitative Inquiry, 19(2), 81–90. https://doi.org/10.1177/1077800412462987

Raciti, M. M. (2021). Can an index approach improve social marketing competitor analysis? Social Marketing Quarterly, 27(3), 213–229. https://doi.org/10.1177/15245004211031872

Rhodes, R. E., Cox, A., & Sayar, R. (2022). What predicts the physical activity intention–behavior gap? A systematic review. Annals of Behavioral Medicine, 56(1), 1–20. https://doi.org/10.1093/abm/kaab044

Riedel, A., Mulcahy, R., Beatson, A., & Keating, B. (2022). Young adult drug interventions: A social marketing systematic review and research agenda. Journal of Social Marketing, 12(2), 191–221. https://doi.org/10.1108/JSOCM-08-2021-0188

Roemer, C., Rundle-Thiele, S., & David, P. (2021). Moving theory focus beyond individuals targeted for change: Observing project stakeholder interactions. Journal of Social Marketing, 11(2), 148–166. https://doi.org/10.1108/JSOCM-07-2020-0131

Rundle-Thiele, S., Dietrich, T., & Carins, J. (2021). CBE: A framework to guide the application of marketing to behavior change. Social Marketing Quarterly, 27(3), 175–194. https://doi.org/10.1177/15245004211021643

Ryan, S. B., Kariippanon, K. E., Okely, A. D., Stanley, R. M., Waqa, G., & Randle, M. (2022). Social marketing benchmark criteria use in health behaviour change interventions in Pacific Islands populations: A systematic review. Journal of Social Marketing, 12(2), 124–153. https://doi.org/10.1108/JSOCM-05-2021-0114

Santos, C. P. V. dos, Lopes, E. L., Dias, J. C., de Andrade, A. G. P., Matos, C. A., & Veiga, R. T. (2021). From social marketing and service-dominant logic to engagement in mindfulness practice: A field experiment. RAUSP Management Journal, 56(3), 348–365. https://doi.org/10.1108/RAUSP-10-2020-0247

Schmidtke, D. J., Kubacki, K., & Rundle-Thiele, S. (2021a). A review of social marketing interventions in low- and middle-income countries (2010–2019). Journal of Social Marketing, 11(3), 240–258. https://doi.org/10.1108/JSOCM-10-2020-0210

Schmidtke, D., Rundle-Thiele, S., Kubacki, K., & Burns, G. L. (2021b). Co-designing social marketing programs with "bottom of the pyramid" citizens. International Journal of Market Research, 63(1), 86–105. https://doi.org/10.1177/1470785320968029

Shin, W., & Lwin, M. O. (2022). Parental mediation of children's digital media use in high digital penetration countries: Perspectives from Singapore and Australia. Asian Journal of Communication, 32(4), 309–326. https://doi.org/10.1080/01292986.2022.2026992

Sieg, A.-K., & Dreesmann, D. (2021). Promoting pro-environmental Behavior in school: Factors leading to eco-friendly student action. Sustainability, 13(12), 6598. https://doi.org/10.3390/su13126598

Sommariva, S., Wimbish, D., Mayes, S., Makris, A., Liddell, V., & Khaliq, M. (2025). Systematic review of social marketing as a behavior change agent in salt reduction. Global Heart, 20(1), Article 100. https://doi.org/10.5334/gh.1478

Spotswood, F., Wiltshire, G., Spear, S., & Makris, A. (2021). Disrupting social marketing through a practice-oriented approach. RAUSP Management Journal, 56(3), 334–347. https://doi.org/10.1108/RAUSP-10-2020-0231

Strehlenert, H., Hedberg Rundgren, E., Sjunnestrand, M., & Hasson, H. (2024). Fidelity to and adaptation of evidence-based interventions in the social work literature: A scoping review. The British Journal of Social Work, 54(3), 1356–1376. https://doi.org/10.1093/bjsw/bcad170

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research: A 32-item checklist for interviews and focus groups. International Journal for Quality in Health Care, 19(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry, 16*(10), 837–851. https://doi.org/10.1177/1077800410383121

UNICEF Indonesia. (2025). Online knowledge and practice of children in Indonesia: A baseline study 2023. https://www.unicef.org/indonesia/child-protection/reports/online-knowledge-and-practice-children-indonesia-baseline-study-2023

van Dalfsen, G., Van Hoecke, J., Westerbeek, H., & De Bosscher, V. (2021). Coaches' views on how to develop shared leadership. Sport, Business and Management: An International Journal, 11(3), 265–286. https://doi.org/10.1108/SBM-12-2019-0123

van de Wetering, J., Leijten, P., Spitzer, J. E., & Thomaes, S. (2022). Does environmental education benefit environmental outcomes in children and adolescents? A meta-analysis. Journal of Environmental Psychology, 81, 101782. https://doi.org/10.1016/j.jenvp.2022.101782

Welch, C., Piekkari, R., Plakoyiannaki, E., & Paavilainen-Mäntymäki, E. (2011). Theorising from case studies: Towards a pluralist future for international business research. Journal of International Business Studies, 42(5), 740–762. https://doi.org/10.1057/jibs.2010.55

Wettstein, D., & Suggs, L. S. (2016). Is it social marketing? The benchmarks meet the social marketing indicator. Journal of Social Marketing, 6(1), 2–17.

Yakovchenko, V., Rogal, S. S., Goodrich, D. E., Lamorte, C., Neely, B., Merante, M., Gibson, S., Scott, D., McCurdy, H., Nobbe, A., Morgan, T. R., & Chinman, M. J. (2023). Getting to implementation: Adaptation of an implementation playbook. Frontiers in Public Health, 10, Article 980958. https://doi.org/10.3389/fpubh.2022.980958

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