



A Scoping Review of Children, Empowerment, and Smartphone Technology Regarding Social Construction Theory with the Aim of Increasing Self-Direction in Democracies

Carol Nash 回

History of Medicine Program, Department of Psychiatry, Temerty Faculty of Medicine, University of Toronto, Toronto, ON M5S 1A1, Canada; carol.nash@utoronto.ca

Abstract: Children are Dependents in a version of social construction theory regarding their inability to self-direct their behavior in democratic society. In this regard, childhood represents a lack of self-direction, a life period when people require the guidance and protection of adults. The assumed necessity of adults supervising children in democracies necessitates substantial social resources, reducing the self-direction of those charged with overseeing children. Given that self-direction defines the optimal experience of people within a democratic society, finding ways to increase the self-direction of children is an individual and a social benefit. In this regard, smartphones have improved self-direction in children. How children have become empowered to self-direct their lives with smartphone use considering social construction theory—as Advantaged, Contenders, or Deviants—is the focus of a scoping review conducted on "children, empowerment, smartphones" of the following databases: OVID, JSTOR, ProQuest, PubMed, Scopus, and Web of Science. The result is that children permitted to self-direct their activities aided by smartphone technology have comparable social behavior to adults positioned as Advantaged, Contenders, or Deviants, and as such, they should be encouraged to utilize smartphone technology to improve their self-direction, as doing so will augment individual and caregiver self-direction, providing increased social benefit.

Keywords: children; social construction theory; democracies; childhood; self-direction; empowerment; smartphones

1. Introduction

Children are viewed as social dependents in democracies, unable to self-direct their behavior in the society to which they are associated. From the perspective of social construction theory (Schneider and Ingram 1993), children are dependent in various ways (Schneider and Ingram 2019). Concerning the power to effect change in society, they are weak. At the same time, they are viewed as good, innocent, and deserving of help by society. Unlikely to mobilize, they assume the position of Dependent—one of the four social construction positions (Schneider and Ingram 1993, 2019). As Dependents in this social construction theory, children have low participation in society and accept that the over-represented burdens they face are "for their own good"-they are not encouraged or given support to devise their own solutions to problems, and social policy is designed to deceive them into remaining weak (Schneider and Ingram 2019). Another position in this theory—held by middle-class taxpayers—is equated with 'the normal' and 'the common good' and represents the foundation of democracies. This position is labeled the Advantaged (Barbehön 2020), defining those who are strong with respect to democratic power and are viewed positively by the society (Schneider and Ingram 1993). As such, policies related to them are considered as conferred on the deserving. In contrast, two other social constructions are viewed negatively in democracies (Schneider and Ingram 1993). One group is Contenders—those who are seen to strive for more than society considers their fair share (Jabbar et al. 2022). They are able to do so by their accurate understanding of how society



Citation: Nash, Carol. 2024. A Scoping Review of Children, Empowerment, and Smartphone Technology Regarding Social Construction Theory with the Aim of Increasing Self-Direction in Democracies. *Social Sciences* 13: 196. https://doi.org/10.3390/ socsci13040196

Academic Editors: Ana Castro Zubizarreta and Roberto Sanz Ponce

Received: 20 February 2024 Revised: 27 March 2024 Accepted: 28 March 2024 Published: 31 March 2024



Copyright: © 2024 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). works—through money, connections, knowledge, and/or their skills—taking advantage of loop-holes and increasing their power when successful; yet, when they achieve power, it is considered by democratic society as a whole to be undeserved, although they are presented with exceptional rewards for their accomplishments (Schneider and Ingram 1993). Finally, there are the Deviants of this social construction theory. They are those with even less power and fewer resources than Dependents, but unlike them, they are unwilling to accept their powerless position.

Although not differentiated by Schneider and Ingram, for the purpose of this study Deviants can themselves be divided into three distinct categories in relation to their response to rules. They may achieve power by acting as disruptors, rationally demonstrating the need for new rules by creating radically new technologies (Hopster 2021). Alternatively, the actions of Deviants can lack persuasiveness in changing the rules because they offer irrational arguments. These Deviants act as deceivers, representing those who saturate social media with fake news (considered one of the greatest threats to humanity (Bodaghi and Oliveira 2022)) or exaggerated news (Buchanan 2020). Finally, Deviants can resort to antisocial activities because they are not interested in society's rules for various reasons (Farrington 2020). These activities, among others, can result in living unusual lives (Turner-Moore and Waterman 2023), destroying or stealing property (Yang and Chen 2023), and/or committing violence against themselves (Lee et al. 2023) or others (Sender et al. 2021). If Deviants of any type gain power as a result of their tactics, it is considered undeserved by society. At best, Deviants are left free-attempts to change them are through authoritarian means rather than reconsidering structural inequities in society (Schneider and Ingram 1993).

Social construction theory originated with the work of Berger and Luckmann ([1966] 2011). In this initial version of the theory, reality is considered to be socially constructed from birth, fashioned by the primary caregiver's language and actions in presenting that "this is how things are done" (p. 88), representing "primary socialization" (p. 161). Individuals become members of society through primary socialization in this view. In contrast, secondary socialization is defined as an induction "into new sections of the objective world" (p. 163) by a subsequent process once an individual has undergone primary socialization. In this way, primary socialization is the perspective through which all secondary socialization is considered. From this mid-20th century theory, peace is achievable in a society when its members feel comfortable with their primary socialization and when any secondary socialization is supportive of maintaining what in particular primary socialization values. If a form of secondary socialization is in conflict with primary socialization and members are attracted to the values of this secondary socialization, those with a primary socialization that is successful will experience guilt and be accepting of the "therapy" offered by society to enable them to gain "insight" to renounce the secondary socialization and re-establish their bond with primary socialization (p. 141). In the view of Berger and Luckmann, "the possibility of "individualism" (that is, of individual choice between discrepant realities and identities) is directly linked to the probability of "unsuccessful socialization" with anyone who self-directs as an individual considered a "traitor" to their primary socialization (p. 210).

This portrayal of social construction theory as a type of competition between primary and secondary socialization for citizen loyalties was called into question with the research on self-directed learning that was initiated during the mid-1970s. To be a self-directed learner was then identified as having the ability to learn independently (Knowles 1975) and was found to be commonly associated with adult education (Knowles 1978; Loeng 2018). What was also discovered is that, for self-directed learning to be effective, it requires self-initiation based on the motivations and values of the individual, rather than those imposed by society (Loeng 2018; Nash 2020; Schweder and Raufelder 2022). Consequently, self-direction was recognized as the cornerstone of democracy (Loeng 2020) and discovered to be the aim of adults and associated with improved health when undertaken (Beller 2021). Such research then resulted in a very different portrayal of the self-directed individual than the view of Berger and Luckmann, who reasoned that those who act individually are "traitors" to their primary socialization. Concerning young people, as Dependents, the need for self-direction may not yet be recognized (Loeng 2020). This is likely because such self-direction is not encouraged by the Advantaged.

Since this initial version of social construction theory in 1966, the theory evolved with a 1993 publication by Schneider and Ingram (1993). It is this version of social construction theory that represents the major divisions of Advantaged, Contender, Dependent, and Deviant (terms capitalized in this study to distinguish them as components of the 1993 theory). The theory was refashioned by these authors during the time when research regarding the ability of self-directed learning to support mental health in adults in maintaining democracies was at its peak (Candy 1987, 1989; Brookfield 1993). Written with an aim to improving political and policy decisions in democracies (most specifically, in the United States) where self-direction is found to be the healthy response of adults to learning, these authors argued that the social construction of target populations is an important, overlooked phenomenon deserving of attention as these social constructions influence policy agenda and provide rationales that legitimate policy choices (Schneider and Ingram 1993).

Schneider and Ingram were considered to respond well to criticisms faced by this theory (Pierce et al. 2014). Their 1997 book, Policy Design for Democracy, presented their research corpus (Schneider and Ingram 1997). By 2008, this book had received the Aaron Wildavsky Enduring Contribution Award, given for the best public policy book or article published over the preceding 20-plus years. To receive this award, the publication was evaluated to have had a major impact on the field (American Political Science Association 2024). By 2014, it was still considered one of the leading theories to understand the policy process (Pierce et al. 2014). Yet, already as early as 1999, the most influential textbook regarding policy process, Theories of the Policy Process (Sabatier 1999), reclassified this theory as a "framework", and it was omitted from consideration in the volume (Pierce et al. 2014). However, Ingram, Schneider, and Peter deLeon were then invited to write the introductory chapter (Barbehön 2020) for the second (Sabatier 2007) and third (Sabatier and Weible 2014) editions of the textbook on the theory of social construction and policy design, with the editorial comments lauding their contribution as rising "to the standard of science through clarity, hypothesis-testing, and the acknowledgement of uncertainty" (Sabatier 2007, p. 11). This recognition of their work by these editors did not extend to the fourth edition (Weible and Sabatier 2018) or the fifth edition (Weible 2023), as the 1993 social construction theory viewed as a framework (Srivastava 2020) was now characterized as worthy but no longer to be highlighted in this influential publication. Recent research has argued that the social construction theory of Schneider and Ingram should not have been reinterpreted as a framework, decreasing its popularity (Barbehön 2020), with several current publications making use of social construction theory as it was intended by these 1993 authors (Gándara and Jones 2020; Nicholson-Crotty et al. 2021; Trochmann 2021). The work of Schneider and Ingram has been taken up recently as a theory rather than a framework in relation to children (Collins and Mead 2021). It is in this regard that the 1993 social construction theory is considered an appropriate lens through which to assess children, empowerment, and smartphones.

Empowerment is a process of gaining an understanding and control of personal, social, economic, and political status to take action to improve one's position in society (Lindacher et al. 2018; Friska et al. 2022). The 1993 version of social construction theory is important in considering empowerment because it helps to explain why some groups are more advantaged than others, independent of traditional notions of political power in resolving who gets what when (Schneider and Ingram 1993). Although children as a group are Dependents, individual children historically have been empowered as each of the Deviants, Contenders, or Advantaged. A child who gained power as a Deviant disruptor is Philo Taylor Farnsworth, the inventor of the first television. Farnsworth worked out the principles for television in the summer of 1921 while still 14 and demonstrated the first working version at 21, inspired by the back-and-forth motion used to plow a field

(Abramson 1992; Schatzkin 2002). As a Contender, Swedish climate activist Greta Thunberg was 15 in 2018 when she began protesting in front of the Swedish parliament to draw attention to the climate crisis—later, taking her message across the Atlantic transported by sail power (Lütkes et al. 2023)—becoming *Time* magazine's Person of the Year for 2019 (Jung et al. 2020). During the period when child labor laws banned children from work except for acting, Shirley Temple rose to become the most loved and well-known star of the Depression in attractively representing the democratic values of middle-class America in her many movies and her yearly birthday parties (Ngai 2023). Her ability to emulate what was considered good in American society (Kasson 2014) placed her among the Advantaged.

Regarding the 1993 social construction theory, it has here been depicted hierarchically whether or not the rules of society are accepted by its members and the power levels in relation to this. In the power hierarchy, revealed in Figure 1, the first level concerns the power of decision-making regarding society's rules. The fact of making a decision, whether "yes" or "no", demonstrates equal power in either response. Next is the type of decision made concerning the 1993 social construction theory. As each construction defined by the theory is equal in the types of variables considered, the power as a social construction is equal. The level below concerns the rewards and burdens associated with these social constructions. Since each construction has both burdens and rewards in either accepting or rejecting society's rules, the power of the representative variables in this regard is equal. However, Deviants can be divided into several other categories concerning how they respond to rules in their interest and their ability to convince others that society's rules should be changed. This way of interpreting Deviants is not part of the Schneider and Ingram social construction theory. Instead, it is informed by Cohen's theory on delinquent boys (Cohen 2016). Although developed in 1955, this theory continues its relevance today (Holt 2020; Iuliana 2021; Rahman 2022). It is a theory of delinquency particularly relevant to the 1993 social construction theory in considering the origins of deviance related to the subculture assessment of middle-class rules (Cohen 2016).

In this way, Deviants have been divided for the purpose of this study into the subclassifications of disruptors, deceivers, and antisocial (not capitalized, as these divisions are not part of the 1993 social construction theory), as seen in Figure 1. Of the Deviants, disruptors remain supportive of rules—but not those accepted by society. They gain their power by the ability to persuade others that the current rules of society are flawed, providing what are deemed to be useful demonstrations that the rules can be productively changed (Baron 2018; Piazza et al. 2023). In contract, there are those Deviants who provide irrational reasons to persuade others of their point of view in trying to gain power. They become, for example, the deceivers in social media with fake news (Al-khateeb and Agarwal 2019; Carlson 2020) or merely by knowingly exaggerating or under-reporting the truth (Markowitz 2020). Lastly, there are those Deviants who provide no reasons for why new rules are required because they are uninterested in society's rules. As a result, they try to achieve power through antisocial means (Mathieu 2023), including (among other things) those actions most harmful to society-stealing (Otto and Bolle 2020), destroying property (Lai 2020), or violent behavior (likely against the Advantaged (Kunst and Obaidi 2020) or Dependents (Kaukinen 2020)). As such, they have reduced power in this hierarchy regarding the acceptance of society's rules. How they respond against society's rules further reduces the power level of each classification of Deviants as seen in Figure 1 because policy decisions in democratic societies are directed first and foremost to higher power relations (Schneider and Ingram 1993). For this reason, the arguments put forward by Deviants are the last to be considered. This is true even when disruptor Deviants can point to rational arguments for considering change. In this way, it takes a significant amount of time for disruptors to convince society that change is needed based on their demonstrations. For example, as a Deviant disruptor, Farnsworth built the first functional television on 7 September 1927 (Lipton 2021). Yet, it was not until 1958 that 86% of Americans owned a television (Falk 2004), making it then a recognized part of middle-class life and a normal reward of the Advantaged.



Figure 1. Based on social construction theory (Schneider and Ingram 1993), the power hierarchy of positions taken regarding whether or not society's rules are accepted by its members concerning the rewards and burdens that they are provided, as well as different types of Deviants (based on a division made here, after Cohen (Cohen 2016)) categorized and the types of reasons presented by them for desiring alternative rules to those of society. Constructions of social construction theory are capitalized. Categories of Deviants created for this study are in lowercase.

In considering smartphone use by children, it is notable that the results of a 2020 international study found that 95% of 13- to 17-year-olds have smartphones in the United States (Herrero-Diz et al. 2020), making their use ubiquitous. Smartphone technology represents and includes portable computer-mediated communication technology (Yao and Ling 2020) that pertains to both the physical equipment and applicable software applications. Smartphones permit individuals to own a personal, hand-held computer for their unimpeded use (Yus 2021) in exchange for paying a monthly telecommunications fee to a service provider (Oh et al. 2022), as well as for being within the range of a transmission tower (Gopi et al. 2023) operated by a server-specific satellite (Liu et al. 2021). Unless users reveal personal information about themselves, other users may be unable to tell the age of a smartphone user. As a result, whether a smartphone user is a child would remain unknown.

For a democratic society that considers children Dependents, this is a problem, as children are unentitled to many forms of social participation. One of the overrepresented burdens that children face is adults' aim to control their smartphone use (Buabbas et al. 2021), guided by medical professionals strongly encouraging parents to prevent their children from opening social media accounts until around age 14 (Haidt and Allen 2020) and research emphasizing smartphone addiction in children (Lee et al. 2020; Al-Amri et al. 2023). Yet, it is found that such addiction is not independent to children and is directly related to parents' own smartphone addiction (Mun and Lee 2021; Gong et al. 2022).

Regarding the 1993 social construction theory, in that society continues to place children in the role of Dependents, this involves the necessity of limiting children's access to smartphone technology—conceivably for their own benefit. Considering children as Dependents gives adults cause for reasons to restrict children's smartphone use (Yadav and Chakraborty 2022); however, this also decreases children's self-direction, simultaneously limiting the self-direction of their caregivers as they are charged with supervising children to an extent that, when supervising, they are unable to devote time to their own self-direction. This is a detriment not only for the children unable to self-direct but also for the adults who are kept from their personal self-direction (Hepburn 2020; Mone and Benga 2022)—important in producing parental burnout in democratic countries—negatively affecting their mental health (Roskam et al. 2023). Therefore, with self-direction the aim, finding ways and means to permit greater self-direction in children will aid not only children but also their parents/caretakers who then would have time released from supervising children to self-direct their own lives, longitudinally representing both an individual and social benefit (Daniel et al. 2023).

The question is, under what conditions can children be empowered through their self-direction to move from being Dependents to being repositioned to any of Deviants, Contenders, or Advantaged through the use of smartphone technology? This scoping review will investigate in what ways children's use of smartphone technology enhances their self-direction by redefining them as Deviants, Contenders, or Advantaged in relation to the 1993 social construction theory. The hypothesis related to this scoping review is that most research related to the three keywords "children, empowerment, smartphones" will concern children as Dependents; otherwise, they will be considered Deviants next most frequently, then Contenders. It is supposed that, since a feature of democratic society is upholding children as less socially competent and in need of protection (Dupont et al. 2022), the fewest studies will admit them as Advantaged. The results of the scoping review surprisingly find this hypothesis is not upheld, as there are few studies related to Deviants, and the number of reports concerning children who are portrayed as Advantaged equals the number related to children who are Contenders. This study is valuable because it represents the first study to conduct a scoping review of "children, empowerment, smartphones" of research published in the last five years regarding democracies at a time when smartphone use by children is found everywhere.

2. Materials and Methods

To gather the materials, the methods used pertained to the preferred reporting item for the systematic review and meta-analyses (PRISMA) flow of information process. A diagram specific to the scoping review was developed. The PRISMA diagram represented in Figure 2 is based on the most recent PRISMA template (Page et al. 2021). Figure 2 follows the flow of exclusion and inclusion criteria over the four days the searches were conducted from 15 to 18 January 2024. In addition, the PRISMA scoping review checklist is included in a Supplementary File (Table S1) outlining the process undertaken in this article. The keywords searched over the four days include "children, empowerment, smartphones". Additionally, to ensure that only publications from the last five years were returned, the qualifier "2019-present" was added to each search, as the best practice for referencing scientific research is that it be published within the last five years (Paul et al. 2021).



Figure 2. Mid-January 2024 scoping review of "children, empowerment, smartphones" of JSTOR, OVID, ProQuest, PubMed, Scopus, and Web of Science, of reports published from "2019-present" with no registers searched, based on PRISMA requirements (Page et al. 2021).

The intent of this scoping review is to investigate research that has been conducted on children who have been empowered by their personal smartphone use. As such, what is not investigated (and is excluded from consideration) is (1) parent/caregiver smartphone use, (2) children's smartphone use in following a standardized curriculum (teaching and/or learning), (3) a focus on migrants or refugees, (4) how businesses can advertise to children through smartphones, (5) development of smartphone technology in relation to children, (6) statistics gathered about children's smartphone use for demographic purposes, and (7) the maltreatment of children. The reason each of these was excluded is that the research does not relate to empowering children's self-direction through their smartphone use. The following databases were searched in this regard: JSTOR, OVID, ProQuest, PubMed, Scopus, and Web of Science. There were no registers searched.

Details of the Individual Searches

As per the requirements of the PRISMA flow diagram (Page et al. 2021), the databases searched are differentiated only regarding from where it was the records were identified (see Figure 2). Already, once the "Records removed *before screening*" is undertaken, all records returned of each database are added together. As a result, the duplicate records removed in total were 2. There were no records marked as ineligible by automation tools. Those that were not peer reviewed = 11, and those not in English = 5. This left 151 records screened. Of these, the records excluded that did not include children = 17 and empowerment = 8. There were no records excluded for not including smartphones. This left 126 reports sought for retrieval with 2 reports not retrieved. Of the 124 reports assessed for eligibility, reports were excluded for concerning the following: parents/caregivers = 42, business = 9, teaching/learning = 19, migrants/refugees = 8, technology = 7, demographics = 13, and maltreatment = 2. This left 24 studies included, for a total of 24 reports of included studies. However, this requirement for reporting by PRISMA means that the details of the individual searches are not presented in the flow diagram. These details are thus presented as follows.

15 January 2024—JSTOR: 60 records were identified for a keyword search of "children, empowerment, smartphones". The records removed before screening included not peer reviewed = 6 and not in English = 3. This left 51 records to be screened. The records excluded that did not include children = 5 and empowerment = 6, producing 40 reports sought for retrieval. One record was not retrieved. Records were then excluded for their focus on parents/caregivers = 6, business = 5, teaching/learning = 10, migrants/refugees = 4, technology = 3, demographics = 3, and maltreatment = 2. The final number of studies included = 6. All 6 reports of studies were included.

16 January 2024—OVID: this search included the following databases searched simultaneously—Embase Classic+Embase, APA PsycInfo, AMED (Allied and Complementary Medicine), and Journals@Ovid Full Text. The additional exclusions entered during the search were "not parents, not adults". The result was 48 records identified with not peer reviewed = 3 and records screened = 45. The records then excluded were those that did not include children = 3 and empowerment = 2. This resulted in 40 reports sought for retrieval. As all reports were retrieved, the reports assessed for eligibility = 40. Of these reports, those excluded were parents/caregivers = 17, teaching = 3, migrants/refugees = 1 technology = 3, and demographics = 6. The final number of studies included = 10.

17 January 2024—ProQuest: similar to OVID, additional exclusions were "not parents, not adults". From this search, unexpectedly, 678 records were identified. It was anticipated that there might be many returns that did not pertain to improving children's empowerment through personal smartphone use. ProQuest offered a list of possible keywords that might be excluded from the search. Of this list, there were 83 determined as unrelated to the purpose of the search. These are the 83 additional exclusions: "COVID-19, pandemics, coronaviruses, education, students, society, technology, families & family life, caregivers, women, learning, data collection, teaching, distance learning, medical personnel, parents & parenting, women's health, questionnaires, consumers, developing countries, innovations, artificial intelligence, online instruction, design, digital technology, household, poverty, algorithms, databases, disease transmission, low income groups, pedagogy, population, pregnancy, professionals, colleges & universities, educational technology, community, case studies, informational technology, research methodology, sustainability, culture, employees, minority & ethnic groups, qualitative research, research, citizenship, crime prevention, information systems, job satisfaction, patients, consumption, content analysis, feedback, leadership, neoliberalism, rural communities, sustainable development, teams, adults, ambivalence, big data, certification, citizen participation, civil society, communication technology, crime, cultural heritage, gender, government agencies, health disparities, health education, health research, hypotheses, medical research, participatory research, power, qualitative analysis, race, refuges, religion, research design". Following these exclusions, there were 42 records identified. Of these, one was not in English. As such, records screened = 41. Of these, 10 records excluded did not include children, resulting in the reports sought for retrieval = 31. Of these, the reports not retrieved = 1, leaving the reports assessed for eligibility = 30. Of these reports, those excluded were parents/caregivers = 9, business = 4, teaching = 5, migrants/refugees = 2, and demographics = 6. Thus, the final number of studies included = 7.

18 January 2024—PubMed: for this search, the additional exclusions were, "not parents, not adults, not business, not technology, not teaching, not migrants, not refugees, not technology, not demographics, not maltreatment", which produced a return of 11. Each of these additional qualifiers was added to the search in an attempt to preempt a similar large, but unrelated, return as occurred with the ProQuest search the day before, when a vast number of research reports were returned unrelated to the intent of the search. The records removed before screening were not peer reviewed = 1, leaving 10 records to be screened. Records excluded that did not include children = 1. This resulted in the reports sought for retrieval = 9. All reports were retrieved, leaving reports assessed for eligibility = 9. Of these, those excluded were parents/caregivers = 8 and migrants/refugees = 1. As a result of these exclusions, the final number of studies included = 0.

18 January 2024—Scopus: similar to the PubMed search, additional exclusions were made before the search by including the following keywords as qualifiers, "not parents, not adults, not business, not technology, not teaching, not migrants, not refugees, not technology, not demographics, not maltreatment". This resulted in a return of 7 records. Records removed before screening were as follows: duplicate record = 1, not peer reviewed = 1, and not in English, leaving 5 records to be screened. There were no records excluded, so reports sought for retrieval = 5. All reports were retrieved, leaving reports assessed for eligibility = 5. Of these, those excluded were parents/caregivers = 2 and technology = 1. The result was that the final number of studies included = 1.

18 January 2024—Web of Science: in keeping with the searches performed on both PubMed and Scopus, additional exclusions were sought with the keywords, "not parents, not adults, not business, not technology, not teaching, not migrants, not refugees, not technology, not demographics, not maltreatment". The result was that only one record was returned. As this one record was a duplicate of another, the final number of studies included = 0.

3. Results

The results of the sequential searches performed from 15 to 18 January 2024 regarding the keywords "children, empowerment, smartphones" of those articles published "2019-present" are presented in Table 1.

The full titles and citations of the articles appearing in truncated form in Table 1 are as follows: "Disability Rights and Robotics" (Savage and Curran 2023); "Prosthetic Performances: Artistic Strategies, and Tactics for Everyday Life" (Zdrodowska 2021); "Privacy in a Pandemic: An Examination of the United States' Response to COVID-19 Analyzing Privacy Rights Afforded to Children Under International Law" (Richens 2021); "Children and Online Privacy Protection: Empowerment from Cognitive Defense Strategies" (Andrews et al. 2020); "Digital hyperconnectivity and the self" (Brubaker 2020); "Unseen potential: photovoice methods in hazard and disaster science" (Schumann et al. 2019); "Left to their own devices? A mixed methods study exploring the impacts of smartphone use on children's outdoor experiences" (Nielsen and Arvidsen 2021); "The promises and challenges of clinical AI in community paediatric medicine" (Singh et al. 2023); "Assessment of digital risks in child and adolescent mental health services: A mixed-method, theory-driven study of clinicians' experiences and perspectives" (Lau-Zhu et al. 2023); "What has been

done to improve learning for intellectual disability? An umbrella review of published meta-analyses and systematic reviews" (De Alvarenga et al. 2023); "Adolescents' experiences of a theory-based behavioural intervention for improved oral hygiene: A qualitative interview study" (Dimenäs et al. 2022), "Iranian nongovernmental organizations' initiatives in COVID-19 pandemic" (Vameghi et al. 2022); "Considerations in pediatric intervention research: Lessons learned from two pediatric pilot studies" (McGovern et al. 2022); "The effectiveness of web-based mobile health interventions in paediatric outpatient surgery: A systematic review and meta-analysis of randomized controlled trials" (Rantala et al. 2020); "Developing web-based health guidance for coaches and parents in child athletics (track and field)" (Jacobsson et al. 2020); "Controlled trial of an mHealth intervention to promote healthy behaviours in adolescence (Teen Power): Effectiveness analysis" (Sousa et al. 2020); "Acceptability and Utility of an Open-Access, Online Single-Session Intervention Platform for Adolescent Mental Health" (Schleider et al. 2020); "Safety.Net: A Pilot Study on a Multi-Risk Internet Prevention Program" (Ortega-Barón et al. 2021); "Effectiveness of mobile health-based self-management application for posttransplant cares: A systematic review" (Abasi et al. 2021); "Development and feasibility testing of the Comfort Ability Program for sickle cell pain: A patient-informed, video-based pain management intervention for adolescents with sickle cell disease" (Wihak et al. 2020); "Technological Ecological Momentary Assessment Tools to Study Type 1 Diabetes in Youth: Viewpoint of Methodologies" (Ray et al. 2021); "'It's like a safe haven fantasy world': Online fandom communities and the identity development activities of sexual and gender minority youth" (McInroy and Craig 2020); "Leveraging the Full Continuum of Care to Prevent Opioid Use Disorder" (Cance et al. 2023); "Growing Up with Smartphones: How Stay-behind Filipino and Indonesian Children Exercise Agency in Transnational Families" (Acedera et al. 2022).

Table 1. Twenty-four returns for a search of the keywords "children, empowerment, smartphones" of those articles published "2019-present" conducted on the following dates in January 2024 for specific databases (including number of returns): 15th—JSTOR (6), 16th—OVID (10), 17th—ProQuest, (7) 18th—PubMed (0), 18th—Scopus, (1) 18th—Web of Science (0) listed the truncated title of each article and the year of publication. Horizontal lines divide returns ordered by the specific databases.

Truncated Article Title	Year
Disability Rights and Robotics: Co-producing Futures	2023
Prosthetic Performances: Artistic Strategies	2021
Privacy in a Pandemic: An Examination	2021
Children and Online Privacy Protection: Empowerment	2020
Digital hyperconnectivity and the self	2020
Unseen potential: photovoice methods in hazard and disaster	2019
Left to their own devices? A mixed methods study	2021
The promises and challenges of clinical AI in community	2023
Assessment of digital risks in child & adolescent mental health	2023
What has been done to improve learning for intellectual	2023
Adolescents' experiences of a theory-based behavioural	2022
Iranian nongovernmental organizations' initiatives in COVID	2022
Considerations in pediatric intervention research: Lessons	2022
The effectiveness of web-based mobile health interventions	2020
Developing web-based health guidance for coaches	2020
Controlled trial of an mHealth intervention	2020
Acceptability and Utility of an Open-Access, Online	2020
Safety.Net: A Pilot Study on a Multi-Risk Internet Prevention	2021
Effectiveness of mobile health-based self-management	2021
Development and feasibility testing of the Comfort Ability	2020
Technological Ecological Momentary Assessment Tools	2021
"It's like a safe haven fantasy world": Online fandom	2020
Leveraging the Full Continuum of Care to Prevent Opioid Use	2023
Growing Up with Smartphones	2022

The number of articles from each year is as follows: 2019 = 1, 2020 = 8, 2021 = 6, 2022 = 4, and 2023 = 5, demonstrating that the empowerment of children with the use of smartphone technology is a continuing research concern. Yet, although this is a persisting research interest, the most recent publications from 2023 are from the perspective of children retaining little power, with four of those from 2023 investigating children as Dependents and one researching children as Deviants. This can be seen from Table 2, which divides the reports assessed into the four categories of social construction theory. The division is in relation to the order of the returns that the databases were searched for in mid-January 2024. In total, these were the number of reports assessed of the returns for each category of social construction: Dependent = 10, Advantaged = 6, Contender = 6, and Deviant = 2. Consequently, the hypothesis that the category of Dependent would be associated with the most numerous results related to the search was correct. However, all other aspects of the hypothesis did not hold. Deviant was expected to be the next most numerous social construction to be represented by research on "children, empowerment, smartphone"; however, it was instead the least frequently studied. As well, the number of studies on Contenders and Advantaged was equal. This unexpected result meant that, regarding smartphone use, children were being considered in these studies as legitimately representing a similar expectation of rewards and burdens as Advantaged middle-class taxpayers. The reasons for classifying the studies as has been done in Table 2 are next to be examined in relation to each social construction.

Table 2. Truncated article titles from Table 1 regarding how children would be classified in relation to social construction theory as Dependent, Advantaged, Contender, or Deviant based on the analysis presented by each published study.

Truncated Article Title	Dependent	Advantaged	Contender	Deviant
Disability Rights and Robotics: Co-producing Futures	\checkmark			
Prosthetic Performances: Artistic Strategies	\checkmark			
Privacy in a Pandemic: An Examination			\checkmark	
Children and Online Privacy Protection: Empowerment		\checkmark		
Digital hyperconnectivity and the self		\checkmark		
Unseen potential: photovoice methods in hazard and disaster		\checkmark		
Left to their own devices? A mixed methods study			\checkmark	
The promises and challenges of clinical AI in community	\checkmark			
Assessment of digital risks in child & adolescent mental health	\checkmark			
What has been done to improve learning for intellectual	\checkmark			
Adolescents' experiences of a theory-based behavioural		\checkmark		
Iranian nongovernmental organizations' initiatives in COVID	\checkmark			
Considerations in pediatric intervention research: Lessons	\checkmark			
The effectiveness of web-based mobile health interventions	\checkmark			
Developing web-based health guidance for coaches	\checkmark			
Controlled trial of an mHealth intervention			\checkmark	
Acceptability and Utility of an Open-Access, Online			\checkmark	
Safety.Net: A Pilot Study on a Multi-Risk Internet Prevention	\checkmark			
Effectiveness of mobile health-based self-management		\checkmark		
Development and feasibility testing of the Comfort Ability			\checkmark	
Technological Ecological Momentary Assessment Tools		\checkmark		
"It's like a safe haven fantasy world": Online fandom				\checkmark
Leveraging the Full Continuum of Care to Prevent Opioid Use				\checkmark
Growing Up with Smartphones			\checkmark	

3.1. Dependents

There are 10 reports that consider children from the perspective of Dependents. All of these except one (Ortega-Barón et al. 2021) are healthcare-related and regard children as needing special protection beyond what would be required by adults in similar circumstances. The use of smartphone technology for empowering either physically or mentally

disabled children (Savage and Curran 2023; Zdrodowska 2021; Singh et al. 2023; De Alvarenga et al. 2023; Rantala et al. 2020) is to achieve the level of social participation normally expected of children. There is no argument put forward in these articles that children might display the empowerment of the Advantaged as a result of this technology. Other articles report on the concern that empowering children with smartphone technology presents risks to children as those people requiring special healthcare protection (Lau-Zhu et al. 2023; Vameghi et al. 2022; McGovern et al. 2022; Jacobsson et al. 2020). The one article that is not healthcare-related (Ortega-Barón et al. 2021) is concerned with the vulnerability of children regarding internet risks. Topics discussed in this report are cyberbullying, sexting, online grooming, cyber-dating abuse, problematic internet use, nomophobia, internet gaming disorder, and online gambling disorder. The intent of the article is to present a program found effective in preventing the increase in these risks for children.

3.2. Advantaged

Unexpectedly, there are six reports assessed that consider children in a manner equating them as among the Advantaged. As such, they are presented as legitimately entitled to the same rewards and burdens as middle-class taxpaying adults. In these articles, children are viewed as having a point of view in social decision-making that is merely different, but equivalent, to that of these adults. How children differ is explained, and the use of smartphones that can empower them based on these differences is presented. The first of these articles (Andrews et al. 2020) examines how children can monitor their own use of smartphones to protect their privacy. In examining the qualities of a digital self, children in the second study (Brubaker 2020) are equivalent to adults in the fact of having what is referred to as "digitable selves". For the third report (Schumann et al. 2019), children are characterized as possibly more important than adult smartphone users in developing photovoice methods for hazards and disasters, as children are those more likely to use their smartphones for recording activity in their neighborhoods. Similar to this study, a report on improving oral hygiene in adolescents considered that they are probably more inclined to look after their oral hygiene than adults in similar circumstances as a result of their using a smartphone app to help in this regard. A point of difference is that the teens (unlike the adults) requested reminders to keep with the program (Dimenäs et al. 2022). In an article on the effectiveness of a mobile health-based self-management application for managing posttransplant care, children were considered equivalent to adults in managing their posttransplant care through the use of smartphone technology. In the view of these authors, as smartphones are available to almost all children, they can and should be used to "reduce psychosocial consequences and improve self-management skills" (Abasi et al. 2021). As those who must learn to manage their self-care from the time they are very young, children with type 1 diabetes are viewed as prime candidates for making use of smartphone apps that help with all aspects of controlling their disease (Ray et al. 2021). Smartphones, in this regard, have greatly empowered children in the successful self-management of individual diabetic consequences in a manner similar to adults.

3.3. Contenders

In the reports where children are presented as Contenders, the authors at some point in the articles define that children generally should be protected in a way that is equivalent to categorizing them as Dependents in social construction theory. Yet, the authors of each paper put forward arguments for why, in the special circumstances presented in each study, children should be treated similarly to adults. The first paper (Richens 2021) presents a position regarding why children are legally entitled to privacy concerning their smartphone use based on the United Nations' Convention on the Rights of the Child. Yet, although this is the position taken by the authors, they are apologetic about promoting this view, as they recognize that children are considered to have the qualities of Dependents by society. It is under this perceived limitation that the authors explain in detail why children must be permitted their privacy. The second report (Nielsen and Arvidsen 2021) begins from the perspective of understanding and promoting the view that children are Dependents. However, after conducting a study on children's outdoor experience in relation to smartphone use, these authors alter their position, arguing that smartphone use actually increases and empowers children's outdoor sociality and that children should be "left to their own devises" in using smartphones since smartphones are not "all bad". Initially presented as part of "vulnerable groups", adolescents are then found to be significantly and positively impacted by an mHealth intervention (Teen Power) improving their lifestyle in multiple domains in the next report returned (Sousa et al. 2020). In feeling the need to present an effective open-access, online single intervention platform for adolescent mental health for its acceptability, the authors of this study present various justifications for the value of this intervention in empowering adolescents in ways that they would not consider necessary if they were testing an adult population (Schleider et al. 2020). Concerning the excruciating pain that children with sickle cell disease are explained to suffer, these children are described in a study as vulnerable (Wihak et al. 2020). On the other hand, these same children are presented as those who are able to become empowered to take control of their pain through various means, including using smartphone apps. The final paper that presents children in a style equivalent to Contenders is one focused on how Filipino and Indonesian children of transnational families, instead of being Dependents (as these authors had expected), are found to be self-directing their lives empowered with the aid of their smartphones (Acedera et al. 2022).

3.4. Deviants

Unexpectedly, there are only two papers that portray children as Deviants regarding social construction theory in relation to their empowerment with the use of their smartphones. Furthermore, based on the more detailed division of Deviant presented in Figure 1, the type of Deviant they represent is antisocial, rather than either a disruptor or deceiver. The first of the two papers (McInroy and Craig 2020) concerns the identity development of 3665 sexual and gender minority youth across the United States and Canada. The importance of smartphone technologies in empowering safe and anonymous communication of these youth based on the culture to which they ascribe is the focus of the article. The second article (Cance et al. 2023) regards the use of smartphone technology to empower youth with opioid use disorder to self-direct to leverage harm reduction programs. It is by tailoring these programs to the young opioid user that they have been found effective.

4. Discussion

This discussion will focus on (1) the implications of the results of the scoping review conducted and (2) the limitations of the search of "children, empowerment, smartphone" in relation to finding so few reports considering children as Deviants with respect to social construction theory. This was the result when it was hypothesized that viewing children as Deviants would return the next greatest number of results for the scoping review compared with the returns of characterizing them as Dependents.

4.1. Implications of the Scoping Review

One of the most significant problems that comes from considering children as Dependents is that they do not see their interests as coinciding with important public goals. Instead, children are encouraged to believe that their problems can only be solved individually and dealt with privately (Schneider and Ingram 1993). They may view the claims of others—especially powerful individuals who are Advantaged—to be more legitimate than their own, agreeing to wait in line until they get what others have. Their participation in society is low and conventional (Schneider and Ingram 1993). In this way, for children to assume another position in social construction theory—improving their self-direction and that of their parents/caregivers—they, their parents/caregivers, and society in general need to disassociate from the mental constraint that children must be Dependents. If becoming Deviants, they no longer accept that they should remain powerless by waiting in line for what others have already. If altering to Contenders, they must be considered as having power, but of the type that remains exceptional in order for them to retain this power. To redefine themselves as part of the Advantaged, a young age would no longer be considered relevant to the benefits and burdens that are socially distributed.

Although it had been hypothesized that when children were viewed as other than Dependents by researchers that the most frequent way they would be considered was as Deviants, this was not the case—particularly in regards to viewing them as either disruptors or deceivers, for which there were no returns. On the other hand, it was also not expected that the number of reports returned viewing children as Contenders would be equal to recognizing them as Advantaged. It was not considered that children would be viewed positively because their usual position in society as Dependents presents them with few rewards and leaves them overburdened. Thus, it was thought that researchers would be most likely to study decreasing the rewards to children regarding their smartphone use. The reason is that there has been a recent focus on smartphone addiction in children (Jin Jeong et al. 2020; Kim et al. 2021), seeing this as a form of deviance (Lee et al. 2020). This view persists, although good and currently unrefuted reasons were proposed in 2018 for why children's smartphone use is not an addiction but merely problematic use regarding society's expectations of children (Panova and Carbonell 2018).

Still, from the unexpected results of the scoping review, it may be that researchers have generally taken note of the advice in the 2018 article and in the last five years have focused on the benefits to children's smartphone use. As such, concerning social construction theory, the interest becomes the rewards children are considered entitled to in smartphone use—placing consideration of children in this regard either as Contenders or as Advantaged. That an equal number of the returns recognized children as Advantaged to Contenders means that children are being accepted as smartphone users comparable to normal adult users (Vaterlaus et al. 2021). In fact, regarding the returns of the scoping review, it is only when researchers hold the position that children rightfully should be Dependents that they are presented as Contenders rather than viewed as Advantaged. This is evident from the returns depicting children as Contenders in this scoping review. When the reason for children's competence in using smartphones is studied, it is recognized that children learn to use smartphones competently, on their own, without the help of adults (Feijoo et al. 2021). Furthermore, a decrease is noted regarding specific children's gaming addictions when the competence of children in using smartphone technology is encouraged (Tso et al. 2022). In other words, when children can self-direct their smartphone use, they become empowered in ways comparable to adults and are then not considered smartphoneaddicted. Furthermore, in becoming more self-directed, time and attention is released from their parents and caregivers to permit these adults to self-direct their own lives—an additional social benefit.

4.2. Limitations

The primary limitation of this scoping review is that the keywords that were searched, "children, empowerment, smartphones", were unable to return any results pertaining to Deviants in relation to social construction theory with respect to either disruptors or deceivers and few antisocial. One reason may be that there is no such research. To test this possibility, a subsequent approach was taken. A limited search of Google Scholar conducted on 4 February 2024 of "deviant crimes against the middle class using smartphones" was undertaken to investigate the widest range of research that this statement might return. As a crawler-based web search engine (Gusenbauer and Haddaway 2020), the order of returns with Google Scholar is that the most relevant articles are returned first. Therefore, with 8610 returns, only the first 40 results were investigated, representing the initial four pages of returns. Nevertheless, although these 40 results were those returned as the most relevant, it is a limitation that not all of the 8610 returns were examined regarding their relevance. Of the 40 results, 11 of these returns were published in peer-reviewed journals and are with respect to children's deviance in democratic societies regarding their smartphone use.

The following are the titles of the reports of included studies as seen in Table 3: "Impacts of Low Self-control and Opportunity Structure on Cyberbullying Developmental Trajectories: Using a Latent Class Growth Analysis" (Cho and Glassner 2021); "Scrolling and the In-Between Spaces of Boredom: Marginalized Youths on the Periphery of Vienna" (Jovicic 2020); "Cyberbullying Victimization and Perpetration in South Korean Youth: Structural Equation Modeling and Latent Means Analysis" (Kim and Lee 2023); "Predictors for runaway behavior in adolescents in South Korea: national data from a comprehensive survey of adolescents" (Kim and Moon 2023); "Associations Between Parental Maltreatment and Online Behavior Among Young Adolescents" (Kim and Han 2021); "Understanding deviance from the perspectives of youth labelled as children in conflict with law in Mumbai, India" (Korde and Raghavan 2023); "Smartphone Addiction Culminating into Youth Deviance: A Sociological Study" (Mohan and Mahanta 2022); "The digital divide in the US criminal justice system" (Ramirez 2022); "The Effects of Korean Parents' Smartphone Addiction on Korean Children's Smartphone Addiction: Moderating Effects of Children's Gender and Age" (Son et al. 2021); "Exploring the Role of Self-Control Across Distinct Patterns of Cyber-Deviance in Emerging Adolescence" (Whitten et al. 2024); "Exploring the Decisional Drivers of Deviance: A Qualitative Study of Institutionalized Adolescents in Malaysia" (Yoga Ratnam et al. 2022).

Table 3. Truncated article titles of a 4 February 2024 Google Scholar search of "deviant crimes against the middle class using smartphones" regarding the type of Deviant presented in the report based on the author's classification of disruptor, deceiver, or antisocial.

Truncated Article Title	Disruptor	Deceiver	Antisocial
Low Self-control and Opportunity Structure on Cyberbullying		\checkmark	
Scrolling and the In-Between Spaces of Boredom: Marginalized Youths			\checkmark
Cyberbullying Victimization and Perpetration in South Korean Youth		\checkmark	
Predictors for runaway behavior in adolescents in South Korea			\checkmark
Associations Between Parental Maltreatment and Online Behavior			\checkmark
Understanding deviance from the perspectives of youth			\checkmark
Smartphone Addiction Culminating into Youth Deviance			\checkmark
The digital divide in the US criminal justice system			\checkmark
The Effects of Korean Parents' Smartphone Addiction on Korean			\checkmark
Exploring the Role of Self-Control Across Distinct Patterns of Cyber		\checkmark	
Exploring the Decisional Drivers of Deviance			\checkmark

A reason these publications did not return in the scoping review of "children, empowerment, smartphones" may have been that the focus of the 4 February 2024 limited Google Scholar search was not empowerment. Google Scholar was not searched as part of the scoping review because it has been evaluated as inappropriate as a principal database since the publication of influential 2020 research in this regard (Gusenbauer and Haddaway 2020). Therefore, there may have been results returned concerning children as disruptors or deceivers if Google Scholar had been searched in the search of "children, empowerment, smartphones". Taking this into consideration, a quick search on 4 February 2024 of the keywords "children, empowerment, smartphones" for publications since 2020 returned 54,500 results—orders of magnitude more than any of the primary databases returns from the mid-January 2024 searches. In other words, had Google Scholar been part of the initial scoping review, there may have been returns among all of these that did consider children as disruptors or deceivers.

Examining the 11 returns from the limited Google Scholar search of "deviant crimes against the middle class using smartphones" (see Table 3), there are three points to note. The first is that, of the 11 returns, five are concerning South Korea (Cho and Glassner 2021; Kim and Lee 2023; Kim and Moon 2023; Kim and Han 2021; Son et al. 2021), two are regarding India (Korde and Raghavan 2023; Mohan and Mahanta 2022), and one focuses on Malaysia (Yoga Ratnam et al. 2022)—all Eastern democracies. There are only three reports

concerning Western democracies: one considering Austria (Jovicic 2020), another focused on the United States (Ramirez 2022), and the third concerning Australia (Whitten et al. 2024). This is relevant to note because these particular Eastern democracies have a 'collectivisthierarchical' culture while the Western democracies are represented by 'individualisticegalitarian' culture (Choo et al. 2023; Steffensmeier et al. 2019; Steffensmeier et al. 2020; You 2023). As such, when children do not do as they are told by parents or caregivers, they are considered deviants in Eastern democracies (Zhai 2022), whereas in Western democracies, children are expected and encouraged to act more independently (Green 2020). In Western democracies, this requires self-control, something that those judged as Deviants in Western cultures are seen to lack-mentioned in each of the three articles concerning Western democracies. The second observation is that most of the ways that children are considered Deviant regarding their smartphone use can be viewed as antisocial. There are only three papers that concern deceivers (Cho and Glassner 2021; Kim and Lee 2023; Whitten et al. 2024), and how they are deceptive in these cases is regarding cyberbullying spreading false or misleading information online to negatively affect the mental health of a person (Zhang et al. 2022). Third, what is most evident is that none of the articles concern disruptors. However, the paper reporting the scrolling behavior of Viennese youth (Jovicic 2020) hints that scrolling behavior may not be merely antisocial. Instead, children who socialize by meeting together to individually scroll through their smartphones, rarely interacting with each other, may be in the process of recreating the norms of how people socialize when together from the point of view of the ethnologist author of this article who, in this respect, does not consider the scrolling behavior of these children a waste of time. Instead, this ethnographer viewed the behavior as a legitimate form of society—one that has been witnessed to grow increasingly attractive to children (Marek 2023). However, for a change to happen regarding how people are seen to rightfully interact when they meet together using smartphones, children must first no longer feel guilt concerning what society currently considers their "mindless scrolling" (De Segovia Vicente et al. 2023). Furthermore, even when such antisocial Deviants move to become part of the Advantaged as a result of attitudinal changes in society, it has been found that changes from disruptors to Advantaged remain unstable and, as a result of this instability, can be reversed (Coppola 2021).

Beyond the limitations that may have resulted from the particular keywords that were chosen to search, an additional limitation of this work is that this scoping review was conducted by one researcher. This may have resulted in a cognitive bias that went undetected in evaluating the various references. Although this author undertook the present study with the aim of objectivity, it is possible that a cognitive bias was unrecognized (Neal et al. 2022). Various frameworks have been developed to debias the research reported (Lauscher et al. 2020; Chen et al. 2023; Yang et al. 2023). These frameworks have recently attracted increased research on the efficacy of these models, something that was an area in need of additional research in 2018 (Tricco et al. 2018). None of these frameworks were used to potentially debias this research; thus, steps were not taken to overcome this limitation.

5. Conclusions

The importance of social construction theory in understanding the relationship of children to their society is one that has evolved since the mid-20th century view that children can be considered properly socialized only if their socialization is imposed regarding the primary socialization of their society (Berger and Luckmann [1966] 2011). After the research regarding self-directed learning in the 1970s (Knowles 1975, 1978), social construction theory (Schneider and Ingram 1993) became more nuanced regarding the view of children living in democracies—recognizing that they are normally Dependents, overburdened with few rewards in this role. Furthermore, as Dependents, they require supervision and support by society through their parents and/or caregivers.

Since an integral component of democratic society has been found to be the selfdirection of its members (Loeng 2020), this need for responsible adults to supervise children reduces both the self-direction of children and that of these adults, creating a detriment for democratic society as a whole, which includes children learning they need to supervise the use of smartphone technology by their parents (Mols et al. 2023). To this extent, supported smartphone use presents the possibility of empowering children in a way that the self-direction of both the children and their parents/caregivers can be increased.

This scoping review of research published within the last five years regarding "children, empowerment, smartphones" has revealed that the almost universal use of smartphones by children has increased their self-direction in a manner equivalent to adults as each of Advantaged, Contenders, and Deviants. Furthermore, what is most surprising is that when the use of smartphones by children is considered without reference to the age of the user (Abasi et al. 2021; Brubaker 2020), children are viewed as Advantaged. The result is that, as children continue to make use of smartphones in their daily lives, their empowerment increases in society. At the same time, this increases their self-direction, releasing the time and attention of their parents and caregivers from supervision to devote themselves to their own self-direction, providing a benefit to democratic society as a whole. The results of this research point to the need for an attitudinal change regarding the smartphone use of children from a focus on protecting them from smartphone addiction (which has been found to be highly dependent on the smartphone addiction of their parents/caregivers (Mun and Lee 2021; Gong et al. 2022)) to encouraging their empowerment through self-directed smartphone use. This is especially so as suspicion regarding the use of smartphones has been noted recently to possibly be merely part of a "broader psychological restoration process" (Areni 2021) regarding this new technology.

The lack of research into empowering children through the use of smartphone technology offers a vast area to be explored. This is particularly so regarding children who would be defined as Deviants with respect to the Schneider and Ingram version of social construction theory. Furthermore, if this type of research is undertaken, the suggestion is that Deviants be investigated concerning the divisions that have been presented here of disruptors, deceivers, and antisocial. The specific focus should be research on children as disruptors and deceivers, as currently, there is a lack of research regarding either of these types of Deviants. Why this research is distinctly important to pursue is that studies on adults as disruptors (French et al. 2020; Hilken et al. 2022; Kelly et al. 2021; Mit Sloan Management Review 2021) and as deceivers (Samoilenko and Suvorova 2023; Sarkadi et al. 2021; Walther et al. 2022; Zainal et al. 2022) are currently the focus of much research concerning smartphone use. Thus, there is the opportunity and need for this research to be extended to children and their ability to be empowered as Deviants—as well as Contenders and as Advantaged—with the use of smartphone technology.

Supplementary Materials: The following supporting information can be downloaded at https://www. mdpi.com/article/10.3390/socsci13040196/s1: Supplementary Table S1: Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: No new data were created or analyzed in this study. Data sharing is not applicable to this article.

Conflicts of Interest: The author declares no conflicts of interest.

References

 Abasi, Sanaz, Azita Yazdani, Shamim Kiani, and Zahra Mahmoudzadeh-Sagheb. 2021. Effectiveness of Mobile Health-based Selfmanagement Application for Posttransplant Cares: A Systematic Review. *Health Science Reports* 4: e434. [CrossRef] [PubMed]
 Abramson, Albert. 1992. Pioneers of Television—Philo Taylor Farnsworth. *SMPTE Journal* 101: 770–84. [CrossRef]

Acedera, Kristel, Bittiandra Chand Somaiah, and Brenda S. A. Yeoh. 2022. Growing Up with Smartphones: How Stay-behind Filipino and Indonesian Children Exercise Agency in Transnational Families. *Transfers* 12: 8–27. [CrossRef]

- Al-Amri, Ahlam, Sahar Abdulaziz, Shahid Bashir, Mohammad Ahsan, and Turki Abualait. 2023. Effects of Smartphone Addiction on Cognitive Function and Physical Activity in Middle-School Children: A Cross-Sectional Study. *Frontiers in Psychology* 14: 1182749. [CrossRef] [PubMed]
- Al-khateeb, Samer, and Nitin Agarwal. 2019. Deviance in Social Media. In *Deviance in Social Media and Social Cyber Forensics,* SpringerBriefs in Cybersecurity. Cham: Springer International Publishing, pp. 1–26.
- American Political Science Association. 2024. Organized Section 4: Aaron Wildavsky Enduring Contribution Award. Available online: https://www.apsanet.org/section-4-aaron-wildavsky-enduring-contribution-award (accessed on 27 January 2024).
- Andrews, J. Craig, Kristen L. Walker, and Jeremy Kees. 2020. Children and Online Privacy Protection: Empowerment from Cognitive Defense Strategies. *Journal of Public Policy & Marketing* 39: 205–19. [CrossRef]
- Areni, Charles. 2021. Techno-Social Disruption, Autobiographical Obsolescence and Nostalgia: Why Parental Concerns about Smart Phones and Social Media Have Historical Precedents as Old as the Printed Word. *Journal of Macromarketing* 41: 267–83. [CrossRef]
- Barbehön, Marlon. 2020. Reclaiming Constructivism: Towards an Interpretive Reading of the 'Social Construction Framework'. *Policy Sciences* 53: 139–60. [CrossRef]
- Baron, David P. 2018. Disruptive Entrepreneurship and Dual Purpose Strategies: The Case of Uber. Strategy Science 3: 439–62. [CrossRef]

Beller, Johannes. 2021. Personal Values and Mortality: Power, Benevolence and Self-Direction Predict Mortality Risk. *Psychology & Health* 36: 115–27. [CrossRef]

- Berger, Peter L., and Thomas Luckmann. 2011. The Social Construction of Reality. New York: Open Road Media. First published 1966.
 Bodaghi, Amirhosein, and Jonice Oliveira. 2022. The Theater of Fake News Spreading, Who Plays Which Role? A Study on Real Graphs of Spreading on Twitter. Expert Systems with Applications 189: 116110. [CrossRef]
- Brookfield, Stephen. 1993. Self-Directed Learning, Political Clarity, and the Critical Practice of Adult Education. *Adult Education Quarterly* 43: 227–42. [CrossRef]
- Brubaker, Rogers. 2020. Digital Hyperconnectivity and the Self. Theory and Society 49: 771-801. [CrossRef]
- Buabbas, Ali, Huda Hasan, and Abrar Abdulmohsen Shehab. 2021. Parents' Attitudes Toward School Students' Overuse of Smartphones and Its Detrimental Health Impacts: Qualitative Study. *JMIR Pediatrics and Parenting* 4: e24196. [CrossRef] [PubMed]
- Buchanan, Tom. 2020. Why Do People Spread False Information Online? The Effects of Message and Viewer Characteristics on Self-Reported Likelihood of Sharing Social Media Disinformation. *PLoS ONE* 15: e0239666. [CrossRef] [PubMed]
- Cance, J. D., E. T. Adams, E. J. D'Amico, A. Palimaru, C. S. F. Fernandes, L. E. Fiellin, E. E. Bonar, M. A. Walton, K. A. Komro, D. Knight, and et al. 2023. Leveraging the Full Continuum of Care to Prevent Opioid Use Disorder. *Prevention Science* 24: 30–39. [CrossRef] [PubMed]
- Candy, Philip Carne. 1987. Reframing Research into 'self-Direction' in Adult Education: A Constructivist Perspective. Ph.D. dissertation, University of British Columbia, Vancouver, BC, Canada. [CrossRef]
- Candy, Philip Carne. 1989. Constructivism and the Study of Self-Direction in Adult Learning. *Studies in the Education of Adults* 21: 95–116. [CrossRef]
- Carlson, Matt. 2020. Fake News as an Informational Moral Panic: The Symbolic Deviancy of Social Media during the 2016 US Presidential Election. *Information, Communication & Society* 23: 374–88. [CrossRef]
- Chen, Jiawei, Hande Dong, Xiang Wang, Fuli Feng, Meng Wang, and Xiangnan He. 2023. Bias and Debias in Recommender System: A Survey and Future Directions. *ACM Transactions on Information Systems* 41: 67. [CrossRef]
- Cho, Sujung, and Steven Glassner. 2021. Impacts of Low Self-Control and Opportunity Structure on Cyberbullying Developmental Trajectories: Using a Latent Class Growth Analysis. *Crime & Delinquency* 67: 601–28. [CrossRef]
- Choo, Ling Suan, Hassan Abu Bakar, and Stacey L. Connaughton. 2023. Understanding Workplace Culture in Malaysia: Cultural Characteristics of Chinese-Malaysian Ethnic Society. *International Journal of Business and Globalisation* 34: 131–51. [CrossRef]
- Cohen, Albert. 2016. Subculture Theory: Delinquent Boys. In *Criminology Theory: Selected Classic Readings*. Edited by Frank P. Williams and Marilyn D. McShane. London and New York: Routledge, pp. 133–48.
- Collins, Mary Elizabeth, and Michelle Mead. 2021. Social Constructions of Children and Youth: Beyond Dependents and Deviants. Journal of Social Policy 50: 493–510. [CrossRef]
- Coppola, Elizabeth C. 2021. The Social Construction of Transgender Individuals and U.S. Military Policy. *Journal of Homosexuality* 68: 2024–46. [CrossRef] [PubMed]
- Daniel, Ella, Maya Benish Weisman, Ariel Knafo-Noam, and Anat Bardi. 2023. Longitudinal Links Between Self-Esteem and the Importance of Self-Direction Values During Adolescence. *European Journal of Personality* 37: 20–32. [CrossRef]
- De Alvarenga, Kevin Augusto Farias, Wagner Lima De Alcântara, and Débora Marques De Miranda. 2023. What Has Been Done to Improve Learning for Intellectual Disability? An Umbrella Review of Published Meta-analyses and Systematic Reviews. *Journal* of Applied Research in Intellectual Disabilities 36: 413–28. [CrossRef] [PubMed]
- De Segovia Vicente, David, Kyle Van Gaeveren, Stephen L. Murphy, and Mariek M. P. Vanden Abeele. 2023. Does Mindless Scrolling Hamper Well-Being? Combining ESM and Log-Data to Examine the Link between Mindless Scrolling, Goal Conflict, Guilt, and Daily Well-Being. *Journal of Computer-Mediated Communication* 29: zmad056. [CrossRef]
- Dimenäs, Sandra L., Anna-Lena Östberg, Mona Lundin, Jesper Lundgren, and Kajsa H. Abrahamsson. 2022. Adolescents' Experiences of a Theory-based Behavioural Intervention for Improved Oral Hygiene: A Qualitative Interview Study. *International Journal of Dental Hygiene* 20: 609–19. [CrossRef]

- Dupont, Serge, Moïra Mikolajczak, and Isabelle Roskam. 2022. The Cult of the Child: A Critical Examination of Its Consequences on Parents, Teachers and Children. *Social Sciences* 11: 141. [CrossRef]
- Falk, Andrew J. 2004. Reading Between the Lines. Diplomatic History 28: 197-225. [CrossRef]
- Farrington, David P. 2020. The Integrated Cognitive Antisocial Potential (ICAP) Theory: Past, Present, and Future. *Journal of Developmental and Life-Course Criminology* 6: 172–87. [CrossRef]
- Feijoo, Beatriz, Charo Sádaba, and Gemma Martínez. 2021. On My Own: Acquiring Technical Digital Skills for Mobile Phone Use in Chile. Parents-Children Perceptions. *International Journal of Media and Information Literacy* 6: 289–98. [CrossRef]
- French, Aaron M., Marten Risius, and Jung P. Shim. 2020. The Interaction of Virtual Reality, Blockchain, and 5G New Radio: Disrupting Business and Society. *Communications of the Association for Information Systems* 46: 603–18. [CrossRef]
- Friska, Dewi, Aria Kekalih, Fergie Runtu, Andini Rahmawati, Naufal Arkan Abiyyu Ibrahim, Eghar Anugrapaksi, Nindya Permata Bunda Surya Utami, Alya Darin Wijaya, and Rathia Ayuningtyas. 2022. Health Cadres Empowerment Program through Smartphone Application-Based Educational Videos to Promote Child Growth and Development. *Frontiers in Public Health* 10: 887288. [CrossRef] [PubMed]
- Gándara, Denisa, and Sosanya Jones. 2020. Who Deserves Benefits in Higher Education? A Policy Discourse Analysis of a Process Surrounding Reauthorization of the Higher Education Act. *The Review of Higher Education* 44: 121–57. [CrossRef]
- Gong, Jian, Yue Zhou, Yang Wang, Zhen Liang, Jiayue Hao, Li Su, Tingwei Wang, Xiangdong Du, Yongjie Zhou, and Yanni Wang. 2022. How Parental Smartphone Addiction Affects Adolescent Smartphone Addiction: The Effect of the Parent-Child Relationship and Parental Bonding. *Journal of Affective Disorders* 307: 271–77. [CrossRef] [PubMed]
- Gopi, B., Jaganathan Logeshwaran, and Thangavel Kiruthiga. 2023. An Innovation in the Development of a Mobile Radio Model for a Dual-Band Transceiver in Wireless Cellular Communication. *BOHR International Journal of Computational Intelligence and Communication Network* 1: 27–32. [CrossRef]
- Green, Lelia. 2020. Confident, Capable and World Changing: Teenagers and Digital Citizenship. *Communication Research and Practice* 6: 6–19. [CrossRef]
- Gusenbauer, Michael, and Neal R. Haddaway. 2020. Which Academic Search Systems Are Suitable for Systematic Reviews or Meta-analyses? Evaluating Retrieval Qualities of Google Scholar, PubMed, and 26 Other Resources. *Research Synthesis Methods* 11: 181–217. [CrossRef] [PubMed]

Haidt, Jonathan, and Nick Allen. 2020. Scrutinizing the Effects of Digital Technology on Mental Health. Nature 578: 226-27. [CrossRef]

Hepburn, Alexa. 2020. The Preference for Self-Direction as a Resource for Parents' Socialisation Practices. *Qualitative Research in Psychology* 17: 450–68. [CrossRef]

- Herrero-Diz, Paula, Jesús Conde-Jiménez, and Salvador Reyes De Cózar. 2020. Teens' Motivations to Spread Fake News on WhatsApp. Social Media + Society 6: 205630512094287. [CrossRef]
- Hilken, Tim, Debbie I. Keeling, Mathew Chylinski, Ko De Ruyter, Maja Golf Papez, Jonas Heller, Dominik Mahr, and Saifeddin Alimamy. 2022. Disrupting Marketing Realities: A Research Agenda for Investigating the Psychological Mechanisms of Next-generation Experiences with Reality-enhancing Technologies. *Psychology & Marketing* 39: 1660–71. [CrossRef]
- Holt, Thomas J. 2020. Subcultural Theories of Crime. In *The Palgrave Handbook of International Cybercrime and Cyberdeviance*. Edited by Thomas J. Holt and Adam M. Bossler. Cham: Springer International Publishing, pp. 513–26.
- Hopster, Jeroen. 2021. What Are Socially Disruptive Technologies? Technology in Society 67: 101750. [CrossRef]
- Iuliana, Adriana. 2021. Subcultural Theories of Delinquency and Crime. Journal of Law and Administrative Sciences 16: 135.
- Jabbar, Huriya, Eupha Jeanne Daramola, Julie A. Marsh, Taylor Enoch-Stevens, Jacob Alonso, and Taylor N. Allbright. 2022. Social Construction Is Racial Construction: Examining the Target Populations in School-Choice Policies. *American Journal of Education* 128: 487–518. [CrossRef]
- Jacobsson, Jenny, Joakim Ekberg, Toomas Timpka, Lena Haggren Råsberg, Marina Sjöberg, Dejan Mirkovic, and Sverker Nilsson. 2020. Developing Web-based Health Guidance for Coaches and Parents in Child Athletics (Track and Field). Scandinavian Journal of Medicine & Science in Sports 30: 1248–55. [CrossRef]
- Jin Jeong, You, Bongwon Suh, and Gahgene Gweon. 2020. Is Smartphone Addiction Different from Internet Addiction? Comparison of Addiction-Risk Factors among Adolescents. *Behaviour & Information Technology* 39: 578–93. [CrossRef]
- Jovicic, Suzana. 2020. Scrolling and the In-Between Spaces of Boredom: Marginalized Youths on the Periphery of Vienna. *Ethos* 48: 498–516. [CrossRef]
- Jung, Jieun, Peter Petkanic, Dongyan Nan, and Jang Hyun Kim. 2020. When a Girl Awakened the World: A User and Social Message Analysis of Greta Thunberg. *Sustainability* 12: 2707. [CrossRef]
- Kasson, John F. 2014. The Little Girl Who Fought the Great Depression: Shirley Temple and 1930s America, 1st ed. New York: W.W. Norton & Company.
- Kaukinen, Catherine. 2020. When Stay-at-Home Orders Leave Victims Unsafe at Home: Exploring the Risk and Consequences of Intimate Partner Violence during the COVID-19 Pandemic. *American Journal of Criminal Justice* 45: 668–79. [CrossRef]
- Kelly, Jaimon T., P. F. Collins, J. McCamley, L. Ball, S. Roberts, and K. L. Campbell. 2021. Digital Disruption of Dietetics: Are We Ready? *Journal of Human Nutrition and Dietetics* 34: 134–46. [CrossRef] [PubMed]
- Kim, Dongsim, and Claire Seungeun Lee. 2023. Cyberbullying Victimization and Perpetration in South Korean Youth: Structural Equation Modeling and Latent Means Analysis. *Crime & Delinquency*, 00111287231193992. [CrossRef]

- Kim, Hyung Ran, and So-Hyun Moon. 2023. Predictors for Runaway Behavior in Adolescents in South Korea: National Data from a Comprehensive Survey of Adolescents. *Frontiers in Psychiatry* 14: 1195378. [CrossRef] [PubMed]
- Kim, Kitai, Jeong Yee, Jee Eun Chung, Hyun Jeong Kim, Ji Min Han, Joo Hee Kim, Kyung Eun Lee, and Hye Sun Gwak. 2021. Smartphone Addiction and Anxiety in Adolescents—A Cross-Sectional Study. *American Journal of Health Behavior* 45: 895–901. [CrossRef] [PubMed]
- Kim, Shinah, and Yoonsun Han. 2021. Associations Between Parental Maltreatment and Online Behavior Among Young Adolescents. Journal of Child and Family Studies 30: 2782–91. [CrossRef]
- Knowles, Malcolm S. 1975. Self-Directed Learning: A Guide for Learners and Teachers. Chicago: Association Press.
- Knowles, Malcolm S. 1978. Andragogy: Adult Learning Theory in Perspective. Community College Review 5: 9–20. [CrossRef]
- Korde, Priyanka, and Vijay Raghavan. 2023. Understanding Deviance from the Perspectives of Youth Labelled as Children in Conflict with Law in Mumbai, India. *The Howard Journal of Crime and Justice* 62: 242–63. [CrossRef]
- Kunst, Jonas R., and Milan Obaidi. 2020. Understanding Violent Extremism in the 21st Century: The (Re)Emerging Role of Relative Deprivation. *Current Opinion in Psychology* 35: 55–59. [CrossRef] [PubMed]
- Lai, Ten-Herng. 2020. Political Vandalism as Counter-speech: A Defense of Defacing and Destroying Tainted Monuments. *European* Journal of Philosophy 28: 602–16. [CrossRef]
- Lauscher, Anne, Goran Glavaš, Simone Paolo Ponzetto, and Ivan Vulić. 2020. A General Framework for Implicit and Explicit Debiasing of Distributional Word Vector Spaces. *Proceedings of the AAAI Conference on Artificial Intelligence* 34: 8131–38. [CrossRef]
- Lau-Zhu, Alex, Ciorsdan Anderson, and Matthew Lister. 2023. Assessment of Digital Risks in Child and Adolescent Mental Health Services: A Mixed-Method, Theory-Driven Study of Clinicians' Experiences and Perspectives. *Clinical Child Psychology and Psychiatry* 28: 255–69. [CrossRef] [PubMed]
- Lee, Jong-Sun, Hoin Kwon, Jungkyu Park, Hyun Ju Hong, and Yong-Sil Kweon. 2023. A Latent Class Analysis of Suicidal Behaviors in Adolescents. *Psychiatry Investigation* 20: 93–100. [CrossRef]
- Lee, Seung-Yup, Hae Kook Lee, Jung-Seok Choi, Soo-young Bang, Min-Hyeon Park, Kyu-In Jung, and Yong-Sil Kweon. 2020. The Matthew Effect in Recovery from Smartphone Addiction in a 6-Month Longitudinal Study of Children and Adolescents. *International Journal of Environmental Research and Public Health* 17: 4751. [CrossRef]
- Lindacher, Verena, Janina Curbach, Berit Warrelmann, Susanne Brandstetter, and Julika Loss. 2018. Evaluation of Empowerment in Health Promotion Interventions: A Systematic Review. *Evaluation & the Health Professions* 41: 351–92. [CrossRef]
- Lipton, Lenny. 2021. Farnsworth. In The Cinema in Flux. New York: Springer, pp. 645-51.
- Liu, Qi, Chengfa Gao, Zihan Peng, Ruicheng Zhang, and Rui Shang. 2021. Smartphone Positioning and Accuracy Analysis Based on Real-Time Regional Ionospheric Correction Model. *Sensors* 21: 3879. [CrossRef]
- Loeng, Svein. 2018. Various Ways of Understanding the Concept of Andragogy. Cogent Education 5: 1496643. [CrossRef]
- Loeng, Svein. 2020. Self-Directed Learning: A Core Concept in Adult Education. *Education Research International* 2020: 3816132. [CrossRef]
- Lütkes, Linda, Leonie Tuitjer, and Peter Dirksmeier. 2023. Sailing to Save the Planet? Media-Produced Narratives of Greta Thunberg's Trip to the UN Climate Summit in German Print Newspapers. *Humanities and Social Sciences Communications* 10: 242. [CrossRef]
- Marek, Jakub. 2023. The Impatient Gaze: On the Phenomenon of Scrolling in the Age of Boredom. *Semiotica* 2023: 107–35. [CrossRef] Markowitz, David M. 2020. The Deception Faucet: A Metaphor to Conceptualize Deception and Its Detection. *New Ideas in Psychology*
- 59: 100816. [CrossRef] Mathieu, Lilian. 2023. Prostitutes and Their Rescuers: Sociological Dynamics and Public Controversies in French Prostitution. Leiden: BRILL.
- McGovern, Colleen M., Elizabeth Hutson, Kimberly Arcoleo, and Bernadette Melnyk. 2022. Considerations in Pediatric Intervention Research: Lessons Learned from Two Pediatric Pilot Studies. *Journal of Pediatric Nursing* 63: 78–83. [CrossRef] [PubMed]
- McInroy, Lauren B., and Shelley L. Craig. 2020. 'It's like a Safe Haven Fantasy World': Online Fandom Communities and the Identity Development Activities of Sexual and Gender Minority Youth. *Psychology of Popular Media* 9: 236–46. [CrossRef]
- Mit Sloan Management Review. 2021. The Next Age of Disruption. Cambridge: The MIT Press.
- Mohan, Vishv, and Raginipriya Mahanta. 2022. Smartphone Addiction Culminating into Youth Deviance: A Sociological Study. *International Journal of Society and Education* 1: 28–50.
- Mols, Anouk, Jorge Pereira Campos, and Jason Pridmore. 2023. Family Surveillance: Understanding Parental Monitoring, Reciprocal Practices, and Digital Resilience. *Surveillance & Society* 21: 469–84. [CrossRef]
- Mone, Ionut-Sergiu, and Oana Benga. 2022. The Relationship between Education, Agency, and Socialization Goals in a Sample of Mothers of Preschoolers. *Journal of Family Studies* 28: 1074–94. [CrossRef]
- Mun, Il Bong, and Seyoung Lee. 2021. How Does Parental Smartphone Addiction Affect Adolescent Smartphone Addiction?: Testing the Mediating Roles of Parental Rejection and Adolescent Depression. *Cyberpsychology, Behavior, and Social Networking* 24: 399–406. [CrossRef] [PubMed]
- Nash, Carol. 2020. Challenges Identifying and Stimulating Self-Directed Learning in Publicly Funded Programs. In *The Digital Era of Learning: Novel Educational Strategies and Challenges for Teaching Students in the 21st Century, Education in a Competitive and Globalizing World*. Edited by C. S. Keator. New York: Nova Science Publishers, pp. 259–300.
- Neal, Tess M. S., Pascal Lienert, Emily Denne, and Jay P. Singh. 2022. A General Model of Cognitive Bias in Human Judgment and Systematic Review Specific to Forensic Mental Health. *Law and Human Behavior* 46: 99–120. [CrossRef] [PubMed]

- Ngai, Natalie. 2023. The Temptation of Performing Cuteness: Shirley Temple's Birthday Parties during the Great Depression. *Feminist Media Studies* 23: 3091–105. [CrossRef]
- Nicholson-Crotty, Jill, Susan M. Miller, and Lael R. Keiser. 2021. Administrative Burden, Social Construction, and Public Support for Government Programs. *Journal of Behavioral Public Administration* 4: 1–29. [CrossRef]
- Nielsen, Jonas Vestergaard, and Jan Arvidsen. 2021. Left to Their Own Devices? A Mixed Methods Study Exploring the Impacts of Smartphone Use on Children's Outdoor Experiences. *International Journal of Environmental Research and Public Health* 18: 3115. [CrossRef]
- Oh, Myoungjin, Jihwan Kim, and Jungwoo Shin. 2022. Does the Improvement of Public Wi-Fi Technology Undermine Mobile Network Operators' Profits? Evidence from Consumer Preferences. *Telematics and Informatics* 69: 101786. [CrossRef]
- Ortega-Barón, Jéssica, Joaquín González-Cabrera, Juan M. Machimbarrena, and Irene Montiel. 2021. Safety.Net: A Pilot Study on a Multi-Risk Internet Prevention Program. *International Journal of Environmental Research and Public Health* 18: 4249. [CrossRef]
- Otto, Philipp E., and Friedel Bolle. 2020. Power Attitudes and Stealing: Senses of Responsibility. *Economics & Sociology* 13: 11–30. [CrossRef]
- Page, Matthew J., Joanne E. McKenzie, Patrick M. Bossuyt, Isabelle Boutron, Tammy C. Hoffmann, Cynthia D. Mulrow, Larissa Shamseer, Jennifer M. Tetzlaff, Elie A. Akl, Sue E. Brennan, and et al. 2021. The PRISMA 2020 Statement: An Updated Guideline for Reporting Systematic Reviews. BMJ 372: n71. [CrossRef] [PubMed]
- Panova, Tayana, and Xavier Carbonell. 2018. Is Smartphone Addiction Really an Addiction? *Journal of Behavioral Addictions* 7: 252–59. [CrossRef]
- Paul, Justin, Weng Marc Lim, Aron O'Cass, Andy Wei Hao, and Stefano Bresciani. 2021. Scientific Procedures and Rationales for Systematic Literature Reviews (SPAR-4-SLR). *International Journal of Consumer Studies* 45: O1–O16. [CrossRef]
- Piazza, Alessandro, Patrick Bergemann, and Wesley Helms. 2023. Getting Away with It (Or Not): The Social Control of Organizational Deviance. *Academy of Management Review, in press.* [CrossRef]
- Pierce, Jonathan J., Saba Siddiki, Michael D. Jones, Kristin Schumacher, Andrew Pattison, and Holly Peterson. 2014. Social Construction and Policy Design: A Review of Past Applications. *Policy Studies Journal* 42: 1–29. [CrossRef]
- Rahman, Md. Mahfuzur. 2022. A Theoretical Framework on Juvenile Gang Delinquency: Its Roots and Solutions. *Beijing Law Review* 13: 477–88. [CrossRef]
- Ramirez, Fanny. 2022. The Digital Divide in the US Criminal Justice System. New Media & Society 24: 514–29. [CrossRef]
- Rantala, Arja, Minna Pikkarainen, Jouko Miettunen, Hong-Gu He, and Tarja Pölkki. 2020. The Effectiveness of Web-based Mobile Health Interventions in Paediatric Outpatient Surgery: A Systematic Review and Meta-analysis of Randomized Controlled Trials. *Journal of Advanced Nursing* 76: 1949–60. [CrossRef] [PubMed]
- Ray, Mary Katherine, Alana McMichael, Maria Rivera-Santana, Jacob Noel, and Tamara Hershey. 2021. Technological Ecological Momentary Assessment Tools to Study Type 1 Diabetes in Youth: Viewpoint of Methodologies. *JMIR Diabetes* 6: e27027. [CrossRef] [PubMed]
- Richens, R. Chantz. 2021. Privacy in a Pandemic. Willamette Journal of International Law and Dispute Resolution 28: 244–90.
- Roskam, Isabelle, Joyce Aguiar, Ege Akgun, Andrew F. Arena, Gizem Arikan, Kaisa Aunola, Eliane Besson, Wim Beyers, Emilie Boujut, Maria Elena Brianda, and et al. 2023. Three Reasons Why Parental Burnout Is More Prevalent in Individualistic Countries: A Mediation Study in 36 Countries. *Social Psychiatry and Psychiatric Epidemiology* 59: 681–94. [CrossRef] [PubMed]
- Sabatier, Paul A., ed. 1999. Theories of the Policy Process. Boulder: Westview Press.
- Sabatier, Paul A., ed. 2007. Theories of the Policy Process, 2nd ed. Boulder: Westview Press.
- Sabatier, Paul A., and Christopher M. Weible, eds. 2014. *Theories of the Policy Process*, 3rd ed. [new ed., new coll.]. Boulder: Westview Press.
- Samoilenko, Sergei A., and Inna Suvorova. 2023. Artificial Intelligence and Deepfakes in Strategic Deception Campaigns: The U.S. and Russian Experiences. In *The Palgrave Handbook of Malicious Use of AI and Psychological Security*. Edited by E. Pashentsev. Cham: Springer International Publishing, pp. 507–29.
- Sarkadi, Ştefan, Alex Rutherford, Peter McBurney, Simon Parsons, and Iyad Rahwan. 2021. The Evolution of Deception. *Royal Society* Open Science 8: 201032. [CrossRef] [PubMed]
- Savage, Sophie, and Tillie Curran. 2023. Disability Rights and Robotics. The International Journal of Disability and Social Justice 3: 26-48.
- Schatzkin, Paul. 2002. The Boy Who Invented Television: A Story of Inspiration, Persistence, and Quiet Passion, 1st ed. Silver Spring: TeamCom Books.
- Schleider, Jessica Lee, Mallory Dobias, Jenna Sung, Emma Mumper, and Michael C. Mullarkey. 2020. Acceptability and Utility of an Open-Access, Online Single-Session Intervention Platform for Adolescent Mental Health. JMIR Mental Health 7: e20513. [CrossRef] [PubMed]
- Schneider, Anne L., and Helen M. Ingram. 1993. Social Construction of Target Populations: Implications for Politics and Policy. *The American Political Science Review* 87: 334. [CrossRef]
- Schneider, Anne L., and Helen M. Ingram. 1997. Policy Design for Democracy. Lawrence: University Press of Kansas.
- Schneider, Anne L., and Helen M. Ingram. 2019. Social Constructions, Anticipatory Feedback Strategies, and Deceptive Public Policy. *Policy Studies Journal* 47: 206–36. [CrossRef]
- Schumann, Ronald L., Sherri Brokopp Binder, and Alex Greer. 2019. Unseen Potential: Photovoice Methods in Hazard and Disaster Science. *GeoJournal* 84: 273–89. [CrossRef]

- Schweder, Sabine, and Diana Raufelder. 2022. Adolescents' Expectancy–Value Profiles in School Context: The Impact of Self-directed Learning Intervals. *Journal of Adolescence* 94: 569–86. [CrossRef] [PubMed]
- Sender, Anna, Manuela Morf, and Anja Feierabend. 2021. Aiming to Leave and Aiming to Harm: The Role of Turnover Intentions and Job Opportunities for Minor and Serious Deviance. *Journal of Business and Psychology* 36: 449–60. [CrossRef]
- Singh, Devin, Sujay Nagaraj, Ryan Daniel, Colleen Flood, Dina Kulik, Robert Flook, Anna Goldenberg, Michael Brudno, and Ian Stedman. 2023. The Promises and Challenges of Clinical AI in Community Paediatric Medicine. *Paediatrics & Child Health* 28: 212–17. [CrossRef]
- Son, Hye-Gyeong, Heeran J. Cho, and Kyu-Hyoung Jeong. 2021. The Effects of Korean Parents' Smartphone Addiction on Korean Children's Smartphone Addiction: Moderating Effects of Children's Gender and Age. *International Journal of Environmental Research and Public Health* 18: 6685. [CrossRef]
- Sousa, Pedro, Ricardo Martinho, Catarina I. Reis, Sara S. Dias, Pedro J. S. Gaspar, Maria Dos Anjos Dixe, Luis S. Luis, and Regina Ferreira. 2020. Controlled Trial of an mHealth Intervention to Promote Healthy Behaviours in Adolescence (TeenPower): Effectiveness Analysis. *Journal of Advanced Nursing* 76: 1057–68. [CrossRef] [PubMed]
- Srivastava, Swati. 2020. Varieties of Social Construction. International Studies Review 22: 325-46. [CrossRef]
- Steffensmeier, Darrell, Yunmei Lu, and Chongmin Na. 2020. Age and Crime in South Korea: Cross-National Challenge to Invariance Thesis. *Justice Quarterly* 37: 410–35. [CrossRef]
- Steffensmeier, Darrell, Yunmei Lu, and Sumit Kumar. 2019. Age–Crime Relation in India: Similarity or Divergence Vs. Hirschi/Gottfredson Inverted J-Shaped Projection? *The British Journal of Criminology* 59: 144–65. [CrossRef]
- Tricco, Andrea C., Erin Lillie, Wasifa Zarin, Kelly K. O'Brien, Heather Colquhoun, Danielle Levac, David Moher, Micah D. J. Peters, Tanya Horsley, Laura Weeks, and et al. 2018. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Annals of Internal Medicine* 169: 467–73. [CrossRef]
- Trochmann, Maren. 2021. Identities, Intersectionality, and Otherness: The Social Constructions of Deservedness in American Housing Policy. *Administrative Theory & Praxis* 43: 97–116. [CrossRef]
- Tso, Winnie W. Y., Frank Reichert, Nancy Law, King Wa Fu, Jimmy De La Torre, Nirmala Rao, Lok Kan Leung, Yu-Liang Wang, Wilfred H. S. Wong, and Patrick Ip. 2022. Digital Competence as a Protective Factor against Gaming Addiction in Children and Adolescents: A Cross-Sectional Study in Hong Kong. *The Lancet Regional Health Western Pacific* 20: 100382. [CrossRef] [PubMed]
- Turner-Moore, Rhys, and Mitch Waterman. 2023. Deconstructing 'Sexual Deviance': Identifying and Empirically Examining Assumptions about 'Deviant' Sexual Fantasy in the DSM. *The Journal of Sex Research* 60: 429–42. [CrossRef] [PubMed]
- Vameghi, Meroe, Monir Baradaran Eftekhari, Katayoun Falahat, and Ameneh Setareh Forouzan. 2022. Iranian Nongovernmental Organizations' Initiatives in COVID-19 Pandemic. *Journal of Education and Health Promotion* 11: 225. [CrossRef]
- Vaterlaus, J. Mitchell, Alexandra Aylward, Dawn Tarabochia, and Jillian D. Martin. 2021. 'A Smartphone Made My Life Easier': An Exploratory Study on Age of Adolescent Smartphone Acquisition and Well-Being. *Computers in Human Behavior* 114: 106563. [CrossRef]
- Walther, Michelle, Petar Petrov, Ryan Smith, Danielle Young, Peter W. De Vries, and Marielle Stel. 2022. Emojis in Deceptive Online Communication: The Frequency and Type of Emoji in Deceptive and NonDeceptive Online Messages. *The Open Psychology Journal* 15: e187435012207050. [CrossRef]
- Weible, Christopher M., ed. 2023. Theories of the Policy Process, 5th ed. New York and London: Routledge, Taylor & Francis Group.
- Weible, Christopher M., and Paul A. Sabatier, eds. 2018. Theories of the Policy Process, 4th ed. London: Routledge.
- Whitten, Tyson, Jesse Cale, Russell Brewer, Katie Logos, Thomas J. Holt, and Andrew Goldsmith. 2024. Exploring the Role of Self-Control Across Distinct Patterns of Cyber-Deviance in Emerging Adolescence. International Journal of Offender Therapy and Comparative Criminology, 0306624X231220011. [CrossRef] [PubMed]
- Wihak, Tessa, Maureen Burns, Jacqueline Miranda, Gail Windmueller, Carlee Oakley, and Rachael Coakley. 2020. Development and Feasibility Testing of the Comfort Ability Program for Sickle Cell Pain: A Patient-Informed, Video-Based Pain Management Intervention for Adolescents with Sickle Cell Disease. *Clinical Practice in Pediatric Psychology* 8: 150–63. [CrossRef]
- Yadav, Savita, and Pinaki Chakraborty. 2022. Child–Smartphone Interaction: Relevance and Positive and Negative Implications. Universal Access in the Information Society 21: 573–86. [CrossRef]
- Yang, Ke, Charles Yu, Yi R. Fung, Manling Li, and Heng Ji. 2023. ADEPT: A DEbiasing PrompT Framework. Proceedings of the AAAI Conference on Artificial Intelligence 37: 10780–88. [CrossRef]
- Yang, Xiuyun, and Qiuping Chen. 2023. Property Rights and Theft Wrongs? A Preliminary Analysis of Stealing in the Extractive Industries. *The Extractive Industries and Society* 15: 101287. [CrossRef]
- Yao, Mike Z., and Rich Ling. 2020. 'What Is Computer-Mediated Communication?'—An Introduction to the Special Issue. *Journal of Computer-Mediated Communication* 25: 4–8. [CrossRef]
- Yoga Ratnam, Kishwen Kanna, Nik Daliana Nik Farid, Li Ping Wong, Nur Asyikin Yakub, Mohd Alif Idham Abd Hamid, and Maznah Dahlui. 2022. Exploring the Decisional Drivers of Deviance: A Qualitative Study of Institutionalized Adolescents in Malaysia. *Adolescents* 2: 86–100. [CrossRef]
- You, Myunghee. 2023. Social Change, Cohort Effects, and Dynamics of the Age–Crime Relationship: Age and Crime in South Korea from 1967 to 2011. *Journal of Quantitative Criminology*. [CrossRef]
- Yus, Francisco. 2021. Smartphone Communication: Interactions in the App Ecosystem, 1st ed. London: Routledge.

Zainal, Anna Gustina, Ricardo Fernando Cosio Borda, Yousef Methkal Abd Algani, Bhaskarrao Yakkala, S. Sanjith, Iskandar Muda, T. Kalaichelvi, M. Mahendran, and B. Kiran Bala. 2022. A Decentralized Autonomous Personal Data Management System in Banking Sector. *Computers and Electrical Engineering* 100: 108027. [CrossRef]

Zdrodowska, Magdalena. 2021. Prosthetic Performances. Icon 26: 125-46.

Zhai, Yida. 2022. Values Change and Support for Democracy in East Asia. Social Indicators Research 160: 179–98. [CrossRef]

Zhang, Wei, Shiqing Huang, Lawrence Lam, Richard Evans, and Chengyan Zhu. 2022. Cyberbullying Definitions and Measurements in Children and Adolescents: Summarizing 20 Years of Global Efforts. *Frontiers in Public Health* 10: 1000504. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.