



The Effect of Stunting Prevent Card (SPC) Games on Adolescent Knowledge in Stunting Prevention

Dwi Wahyu Wulan Sulistyowati¹, Halimatus Sa'diyah¹, Ahdatul Islamiah¹

¹Poltekkes Kemenkes Surabaya, Surabaya, Indonesia
dwwulan1@gmail.com

Abstract. Adolescent knowledge plays a significant role in stunting prevention. Preliminary studies in 2022 show that 15 out of 20 youth do not know what stunting is. Stunting education efforts in schools require new and fun innovations. SPC games can be key because they can play and learn about stunting at the same time. This study aims to determine the effect of SPC games on adolescent knowledge in stunting prevention. Types of research quasi-experimental with a plan one group pretest and posttest design. A total of 42 respondents were selected using simple random sampling. The material in the SPC game is the definition, causes, characteristics, impact, prevention, and early detection of stunting. Test the hypothesis and normality using the *Wilcoxon Signed Rank Test* and *Shapiro Wilk*. In adolescent knowledge about stunting before being given the SPC game, some (50%) of the respondents were lacking, while after being given the SPC game, most (62%) of the respondents were good. Uji Statistik Wilcoxon Signed Rank Test significant value was obtained $p = 0.000$ ($p > 0.050$) and there is a difference in scores before education (mean 8.4) and after education (mean 12.3). SPC games increase adolescent knowledge about stunting so that they can become educational media from an early age and prevent stunting in the future.

Keywords: Influence SPC Game, Adolescent Knowledge, Stunting Prevention.

1 Introduction

Knowledge has a significant role in shaping individual behavior in making decisions and responding to an object. Good knowledge can overcome various problems in life. Adolescence is most effective for obtaining education about the incidence and prevention of stunting [1, 2]. The results of a preliminary study conducted at SMAN 12 Surabaya, in the Benowo area, show that 15 out of 20 teenagers do not know what stunting is [3, 4]. According to the 2021 Indonesian Toddler Nutrition Status Survey (SSGBI), stunting in Indonesia has reached a prevalence of 24.4%. The city of Surabaya is ranked 6th for stunting in East Java, with a prevalence of 28.9% [5, 6]. Data from the Indonesian Ministry of Health in 2018 stunted youth in East Java reached 37.1% [7, 8]. The Benowo Village is the main priority for reducing stunting in the City of Surabaya in 2021 (26.58%). This figure exceeds the threshold of the World Health Organization (WHO), which is 20% [9, 10].

Lack of knowledge among adolescents about stunting because they have not been exposed to health education about stunting itself [11, 12]. No wide and large reach can invite teenagers to attend counseling events, talk shows, and seminars about stunting. Teenagers tend to be indifferent to things that have long-lasting effects and are unfamiliar to them. Adolescents who do not know stunting cannot prevent stunting in themselves starting from when they become brides, pregnant women, or their children later [13]. The impacts are growth failure, cognitive and motor development barriers, metabolic disorders, decreased intellectual capacity, decreased learning capacity at school, decreased productivity as adults, and increased risk of non-communicable diseases such as hypertension, coronary heart disease, stroke, and diabetes mellitus [14, 15]. As a result, there is no qualified young generation [16, 17]. Government efforts to prevent stunting, such as the Efforts to Accelerate the Reduction of Maternal Mortality Rate (MMR), Youth Posyandu, and Health Education [18]. There is Presidential Regulation No. 72 of 2021 concerning Accelerating the Reduction of Stunting [19]. BKKBN through genre youth and partners sent three representatives from each sub-district in the city of Surabaya to take part in educational seminars which were delivered through lots of games [20, 21].

Therefore, there must be innovation and research with fun health education. Adolescent psychology is easily attracted to and enthusiastic about new things that are competitive. At the age of adolescence the ability to think, introspection, and absorption of values will develop so that it is appropriate to be given education. The PSC game is expected to be one of the educational media that can increase knowledge about stunting. PSC cards can hone youth creativity and become an icebreaker because they can play while learning. Based on this description, the researcher is interested in examining the effect of the Stunting Prevent Card (SPC) Game on Adolescent Knowledge in Stunting Prevention.

2 Methods

This research is of the Quasi-Experimental type (Pseudo-Experimental) with a one-group pretest and posttest design without a control group from August 2022 to April 2023. The population of class X students at SMA Negeri 12 Surabaya has a total of 354 children with 42 samples using the Simple Random Sampling technique. Normality test with Shapiro-Wilk and hypothesis testing with the Wilcoxon Signed Rank Test. Ethical due diligence with number No.EA1402/KEPK-Poltekkes_Sby/V/2023.

3 Result

The presentation of research data begins with general data or demographic characteristics of respondents and specific data.

Table 1. Distribution of frequency characteristics of respondents in February-April 2023

No	Characteristics	Category	Frequency	Percentage (%)
1.	Age	16 Years	37	88
		17 Years	5	12
2.	Sex	Man	19	45
		Woman	23	55
3.	Parent's job	PNS	10	24
		Businessman	6	14
		Private sector employee	25	60
		Doesn't work	1	2
4.	Parent's Education	Basic education (SD, SMP, MI, MTs)	5	12
		Secondary Education (SMA, SMK, MA)	26	62
		higher education (D3, D4, S1, S2, S3)	11	26
5.	Experience (Stunting Families)	Yes	0	0
		No	42	100
6.	Ever Received Stunting Information	Yes	30	71
		No	12	29
7.	Sources of Information About Stunting	Parent	2	5
		Health workers	11	26
		Media Mass	3	7
		Social media	14	33
		There isn't any	12	29

Source: Primary Data, 2023

Table 1 shows that almost all respondents (88%) are 16 years old. Most of the respondents (55%) are female. Most of the respondents (60%) their parents work as private employees. The educational background of the parents of most of the respondents (62%) had secondary education (SMA, SMK, MA). Nearly half of the respondents (29%) had never received any information about stunting. So they don't know about stunting.

Table 2. Frequency distribution of adolescent knowledge before being given SPC games in February April 2023

Knowledge	Good		Enough		Less		Total	
	n	%	n	%	n	%	N	%
Before	6	14	15	36	21	50	42	100

Source: Primary Data, 2023

Table 2 shows that before being given the SPC game treatment, half of the respondents (50%) had little knowledge about stunting and only a small proportion of respondents (14%) had good knowledge.

Table 3. Frequency distribution of adolescent knowledge after being given SPC games February-April 2023

Knowledge	Good		Enough		Less		Total	
	n	%	N	%	n	%	N	%
After	26	62	13	31	3	7	42	100

Source: Primary Data, 2023

Table 3 shows that after being given the SPC game treatment, most of the respondents (62%) had good knowledge about stunting and only a small number of respondents (7%) had poor knowledge.

Table 4. Table of Wilcoxon signed rank test results intervention

Intervention		N	Mean Ranks	Sum of Ranks	Z	P
SPC Game	Negative Ranks	0	.00	.00	-4.638	.000
	Positive Ranks	28	14.50	406.00		
	Ties	14				

Source: Primary Data, 2023

Table 4 shows that the results of the study were tested with the Wilcoxon Signed Rank Test Statistical Test where a z-value of -4.638 was obtained and a significance p-value of 0.000 ($p > 0.050$). Thus it can be concluded that statistically it is believed that there is an effect of playing the Stunting Prevent Card (SPC) on Adolescent Knowledge in Stunting Prevention.

4 Discussion

Based on the results of the study, it was found that the knowledge of adolescents before being given the SPC game showed that half of the respondents had insufficient knowledge, and after being given the SPC game, most of the respondents were well-informed about stunting. Lack of knowledge of adolescents because teenagers have not received material about stunting. Research by Rosyada, Salim & and Syairaji (2020) suggests that some respondents did not understand the important role of youth in preventing stunting before pregnancy. Without knowledge and a healthy lifestyle, adolescent health is neglected [22, 23]. According to Basitha (2020) until this moment teenagers have not cared about preventing stunting through proper nutrition and stimulation. According to Basitha, (2020), "many people think the issue of stunting is only for parents and married couples so that many teenagers are not exposed to information about stunting" [24]. Whereas increased knowledge of adolescents in line with research carried out (Widita Muharyani, 2022) after interventions related to stunting knowledge

such as 1000 HPK, nutrition for pregnant women and children are known to be mostly knowledgeable respondents [25]. As many as 22 out of 25 adolescents have good knowledge after receiving interventions on how to recognize, prevent, and overcome stunting [26]. Another study conducted at the Bukuan Health Center, Samarinda, involved 20 junior high and high school youth (Noviasty, 2020) it was found that most of the respondents had good knowledge [27].

The use of educational media (games) is like a snake ladder, game digital, monopoly, and puzzle with goals and objectives different ones will add to the understanding of the material [28–30]. In line with research by (Styaningrum, 2021) with the Millennial Card Healthy (KMS) about anemia, adolescent knowledge increases. In another study with games QOGISAKI (quartet cards) obtained the value of junior high school age respondents' knowledge about anemia from three schools in Palu increased [31]. Nurlela's research (2018) The Children's Love Card is effective in increasing catin's knowledge about 1000 HPK. In line with research (Kusumawati, 2022) Smart Cards Prevent Stunting is effective in increasing the knowledge of pregnant women [32]. Other research (Septiyaningsih, 2022) with Stunting Smart respondents' knowledge about stunting in children in the Sidanegara Village increased [33]. In line with research (Rusman, 2020) and (Fitriani, 2021) Stunting prevention cards are effective in increasing knowledge [34–36].

Based on the description above, the researcher believes that knowledge about stunting is lacking, because it can be seen that most of the respondents answered questions number 6 and 16 in the pretest questionnaire incorrectly. This means that teenagers do not know the long-term impact and who can prevent stunting. Followed by students who asked what stunting was in filling out general data. Meanwhile, an increase in adolescent knowledge is obtained from experience, and information on stunting comes from a variety of different sources. Supported by education and parental work, can facilitate the learning process. Almost all respondents are 16 years old. This can affect a person's response in thinking and making decisions. The value of knowledge increases in filling out the posttest questionnaire because the respondent has played the SPC game.

SPC game is a new education that has been modified and has never been studied before in adolescents. The advantages of this game can foster emotional intelligence, motor, cognitive (concentration), and problem-solving skills. Players will use strategies so that they win, meaning that teenagers will have the ability to think, find solutions, and conceptualize the cause and effect of a situation that will be faced. The pictures, colors, and writing on the SPC are by the material, which has passed a product test by 15 respondents. The rules of the game can develop the ability to follow directions, be sportsmanlike, be honest, and feel satisfied when something is done. The existence of WAKASI (Educational Referees), can hone responsibility, leadership, and other positive attitudes. SPC is a real card game, not in the grip (gadget). This can train organizational skills and maintain solidarity between players. In its implementation, respondents admitted that they were familiar with card games, meaning that this SPC game could easily enter and be accepted by society, especially among teenagers. At the end

of the study, the respondents acknowledged that education with games made the atmosphere exciting and increased curiosity. There are limitations in this study that there is no additional material and that sampling and intervention require a relatively long time.

5 Conclusion

Increasing the knowledge of respondents regarding stunting prevention is very necessary. Good knowledge will encourage youth to prevent stunting so that it is hoped that the number of morbidities can be reduced. Teenagers can take advantage of trusted sources to get information related to stunting. Teenagers must be wise in utilizing the time between playing and studying. It is suggested that future studies provide additional material before intervening and conducting further tests on SPC game products. For health workers, institutions, and public spaces, this SPC game is expected to be educational and informational to add insight and knowledge in identifying problems, especially those related to stunting. Meanwhile, the school is expected to support educational efforts with SPC games so that it can prevent stunting in the future and increase adolescent knowledge from an early age (pre-conception period).

References

1. Argaw, D., Hussen Kabthymmer, R., Endale, T., Wudneh, A., Daniel Meshesha, M., Tadesse Hirbu, J., Bayisa, Y., Abebe, L., Tilahun, R., Aregawi, S., Lodebo Funga, M., Wodaynew, T., Demisse, B., Cherinet Eritero, A., Getachew Assefa, D., Daganchew Zeleke, E., Mengistu, N., Temesgen Alemu, K., Molla, W.: Stunting and associated factors among primary school children in Ethiopia: School-based cross-sectional study. *Int J Afr Nurs Sci.* 17, 100451 (2022). <https://doi.org/10.1016/j.ijans.2022.100451>.
2. Clemente, A.P.G., da Luz Santos, C.D., Martins, V.J.B., Albuquerque, M.P., Fachim, M.B., Sawaya, A.L.: Lower waist circumference in mildly-stunted adolescents is associated with elevated insulin concentration. *Jornal de Pediatria (Versão em Português)*. 90, 479–485 (2014). <https://doi.org/10.1016/j.jpedp.2014.07.001>.
3. Oginawati, K., Salami, I.R.S., Yapfrine, S.J., Fahimah, N., Susetyo, S.H.: The associations of heavy metals exposure in water sources to the risk of stunting cases. *Emerg Contam.* 9, 100247 (2023). <https://doi.org/10.1016/j.em-con.2023.100247>.
4. Wendt, A., Hellwig, F., Saad, G.E., Faye, C., Mokomane, Z., Boerma, T., Barros, A.J.D., Victora, C.: Are children in female-headed households at a disadvantage? An analysis of immunization coverage and stunting prevalence: in 95 low- and middle-income countries. *SSM Popul Health.* 15, 100888 (2021). <https://doi.org/10.1016/j.ssmph.2021.100888>.
5. Ramires, E.K.N.M., de Menezes, R.C.E., Oliveira, J.S., Oliveira, M.A.A., Temoteo, T.L., Longo-Silva, G., Leal, V.S., Costa, E.C., Asakura, L.: Nutritional status of children and adolescents from a town in the semiarid Northeastern

- Brazil* *Study conducted at Faculdade de Nutrição, Universidade Federal de Alagoas, Alagoas, AL, Brazil. *Revista Paulista de Pediatria (English Edition)*. 32, 200–207 (2014). [https://doi.org/10.1016/s2359-3482\(15\)30011-7](https://doi.org/10.1016/s2359-3482(15)30011-7).
6. Phuong Nguyen, Samuel Scott, Long Khuong, P., Pramanik, Akhter Ahmed, Kaosar Afsana, and P., Menon: Why Are Adolescent Mothers More likely to Have Stunted and. *Nutritional Epidemiology*. 2020, 1463 (2020). <https://doi.org/10.1093/cdn/nzaa061>.
 7. Mohammed, B., Belachew, T., Kedir, S., Abate, K.H.: Effect of school feeding program on academic performance of primary school adolescents: A prospective cohort study. *Clin Nutr ESPEN*. 56, 187–192 (2023). <https://doi.org/10.1016/j.clnesp.2023.05.017>.
 8. Baxter, J.A.B., Kortenaar, J.L., Wasan, Y., Hussain, A., Soofi, S.B., Ahmed, I., Bhutta, Z.A.: Age-Based Anthropometric Cutoffs Provide Inconsistent Estimates of Undernutrition: Findings from a Cross-Sectional Assessment of Late-Adolescent and Young Women in Rural Pakistan. *Curr Dev Nutr*. 5, nzab130 (2021). <https://doi.org/10.1093/cdn/nzab130>.
 9. Shinde, S., Harling, G., Assefa, N., Bärnighausen, T., Bukenya, J., Chukwu, A., Darling, A.M., Manu, A., Millogo, O., Mwanyika-Sando, M., Ncayiyana, J., Nurhussien, L., Patil, R., Tang, K., Fawzi, W.: Counting adolescents in: the development of an adolescent health indicator framework for population-based settings. *EClinicalMedicine*. 61, 102067 (2023). <https://doi.org/10.1016/j.eclinm.2023.102067>.
 10. Said-Mohamed, R., Micklesfield, L.K., Pettifor, J.M., Norris, S.A.: Has the prevalence of stunting in South African children changed in 40 years? A systematic review. *BMC Public Health*. 15, 1–10 (2015). <https://doi.org/10.1186/s12889-015-1844-9>.
 11. Yanti, N.D., Betriana, F., Kartika, I.R.: Faktor Penyebab Stunting pada Anak: Tinjauan Literatur. *Real in Nursing Journal*. 3, 1–10 (2020).
 12. Qi, H., Li, G.: An evolutionary game analysis on knowledge-sharing mechanism of the innovation consortiums in the blockchain era. *Procedia Comput Sci*. 214, 1484–1491 (2022). <https://doi.org/10.1016/j.procs.2022.11.334>.
 13. Hegetschweiler, K.T., Wartmann, F.M., Dubernet, I., Fischer, C., Hunziker, M.: Urban forest usage and perception of ecosystem services – A comparison between teenagers and adults. *Urban For Urban Green*. 74, 127624 (2022). <https://doi.org/10.1016/j.ufug.2022.127624>.
 14. Akseer, N., Vaivada, T., Rothschild, O., Ho, K., Bhutta, Z.A.: Understanding multifactorial drivers of child stunting reduction in exemplar countries: A mixed-methods approach. *American Journal of Clinical Nutrition*. 112, 792S–805S (2020). <https://doi.org/10.1093/ajcn/nqaa152>.
 15. Abdulahi, A., Shab-Bidar, S., Rezaei, S., Djafarian, K.: Nutritional Status of Under Five Children in Ethiopia: A Systematic Review and Meta-Analysis. *Ethiop J Health Sci*. 27, 175–188 (2017). <https://doi.org/10.4314/ejhs.v27i2.10>.
 16. Moll, P., Isak, S., Hellwagner, H., Burke, J.: A Quadtree-based synchronization protocol for inter-server game state synchronization. *Computer Networks*. 185, 107723 (2021). <https://doi.org/10.1016/j.comnet.2020.107723>.

17. Chapman, L., Rose, K., Hull, L., Mandy, W.: "I want to fit in... but I don't want to change myself fundamentally": A qualitative exploration of the relationship between masking and mental health for autistic teenagers. *Res Autism Spectr Disord.* 99, 102069 (2022). <https://doi.org/10.1016/j.rasd.2022.102069>.
18. Kementerian Kesehatan RI: Buletin Jendela Data dan Informasi Kesehatan: Situasi Balita Pendek (Stunting) di Indonesia. Kementerian Kesehatan RI. 20 (2018).
19. Gong, L., Zhang, X.: Study of the Game Theory Analysis and Incentive Mechanism of Inter-organizational Knowledge Sharing in Cooperative R&D. *IERI Procedia.* 10, 266–273 (2014). <https://doi.org/10.1016/j.ieri.2014.09.087>.
20. Indonesian Government: Presidential Decree of Republic Indonesia No 72/2021 about Accelerating Stunting Reduction. Indonesian Government. 23 (2021).
21. Mardiana, M., Susilo, M.T., Nugroho, E., Rachamawati, L.: Pencegahan Stunting Pada Era New Normal di Puskesmas Sekaran. *Berdikari: Jurnal Inovasi dan Penerapan Ipteks.* 10, 205–212 (2022). <https://doi.org/10.18196/berdikari.v10i2.13240>.
22. de Bruijn, C.M.A., Hamming, G.A.C., Knibbe, C.A.J., Tromp, E., Benninga, M.A., Vlioger, A.M.: Teenagers' and parental individual needs for side effects information and the influence of nocebo effect education. *Patient Educ Couns.* 108, 1–5 (2023). <https://doi.org/10.1016/j.pec.2022.107587>.
23. Haile, B., Headey, D.: Growth in milk consumption and reductions in child stunting: Historical evidence from cross-country panel data. *Food Policy.* 118, 102485 (2023). <https://doi.org/10.1016/j.foodpol.2023.102485>.
24. Hijrawati, Usman, A.N., Syarif, S., Hadju, V., As'ad, S., Baso, Y.S.: Use of technology for monitoring the development of nutritional status 1000 hpk in stunting prevention in Indonesia. *Gac Sanit.* 35, S231–S234 (2021). <https://doi.org/10.1016/j.gaceta.2021.10.028>.
25. Majuri, M.: Inter-firm knowledge transfer in R&D project networks: A multiple case study. *Technovation.* 115, 102475 (2022). <https://doi.org/10.1016/j.technovation.2022.102475>.
26. Mbabazi, J., Pesu, H., Mutumba, R., Filteau, S., Lewis, J.I., Wells, J.C., Olsen, M.F., Briend, A., Michaelsen, K.F., Mølgaard, C., Ritz, C., Nabukeera-Barungi, N., Mupere, E., Friis, H., Grenov, B.: Effect of milk protein and whey permeate in large quantity lipid-based nutrient supplement on linear growth and body composition among stunted children: A randomized 2 × 2 factorial trial in Uganda. *PLoS Med.* 20, e1004227 (2023). <https://doi.org/10.1371/journal.pmed.1004227>.
27. Mahmudiono, T., Al Mamun, A., Nindya, T.S., Andrias, D.R., Megatsari, H., Rosenkranz, R.R.: The effectiveness of nutrition education for overweight/obese mother with stunted children (NEO-MOM) in reducing the double burden of malnutrition. *Nutrients.* 10, 1–16 (2018). <https://doi.org/10.3390/nu10121910>.

28. Walker, S.P., Chang, S.M., Powell, C.A., Simonoff, E., Grantham-McGregor, S.M.: Early childhood stunting is associated with poor psychological functioning in late adolescence and effects are reduced by psychosocial stimulation. *Journal of Nutrition*. 137, 2464–2469 (2007). <https://doi.org/10.1093/jn/137.11.2464>.
29. Bernal, J., Frongillo, E.A., Herrera, H.A., Rivera, J.A.: Food insecurity in children but not in their mothers is associated with altered activities, school absenteeism, and stunting. *Journal of Nutrition*. 144, 1619–1626 (2014). <https://doi.org/10.3945/jn.113.189985>.
30. Beal, T., Tumilowicz, A., Sutrisna, A., Izwardy, D., Neufeld, L.M.: A review of child stunting determinants in Indonesia. *Matern Child Nutr*. 14, 1–10 (2018). <https://doi.org/10.1111/mcn.12617>.
31. Coly, A.N., Milet, J., Diallo, A., Ndiaye, T., Bénéfice, E., Simondon, F., Wade, S., Simondon, K.B.: Preschool stunting, adolescent migration, catch-up growth, and adult height in young Senegalese men and women of rural origin. *Journal of Nutrition*. 136, 2412–2420 (2006). <https://doi.org/10.1093/jn/136.9.2412>.
32. Thurstans, S., Sessions, N., Dolan, C., Sadler, K., Cichon, B., Isanaka, S., Roberfroid, D., Stobaugh, H., Webb, P., Khara, T.: The relationship between wasting and stunting in young children: A systematic review. *Matern Child Nutr*. 18, (2022). <https://doi.org/10.1111/mcn.13246>.
33. Barffour, M.A., Hinnouho, G.M., Kounnavong, S., Wessells, K.R., Ratsavong, K., Bounheuang, B., Chanhthavong, B., Sithideth, D., Sengnam, K., Arnold, C.D., Brown, K.H., Hess, S.Y.: Effects of Daily Zinc, Daily Multiple Micronutrient Powder, or Therapeutic Zinc Supplementation for Diarrhea Prevention on Physical Growth, Anemia, and Micronutrient Status in Rural Laotian Children: A Randomized Controlled Trial. *Journal of Pediatrics*. 207, 80–89.e2 (2019). <https://doi.org/10.1016/j.jpeds.2018.11.022>.
34. Clemente, A.P.G., Santos, C.D.D.L., Martins, V.J.B., Albuquerque, M.P., Fachim, M.B., Sawaya, A.L.: Lower waist circumference in mildly-stunted adolescents is associated with elevated insulin concentration. *J Pediatr (Rio J)*. 90, 479–485 (2014). <https://doi.org/10.1016/j.jped.2014.01.015>.
35. Ghodsi, D., Omidvar, N., Nikooyeh, B., Roustae, R., Shakibazadeh, E., Al-Jawaldeh, A.: Effectiveness of community nutrition-specific interventions on improving malnutrition of children under 5 years of age in the eastern mediterranean region: A systematic review and meta-analysis. *Int J Environ Res Public Health*. 18, (2021). <https://doi.org/10.3390/ijerph18157844>.
36. Bhutta, Z.A., Akseer, N., Keats, E.C., Vaivada, T., Baker, S., Horton, S.E., Katz, J., Menon, P., Piwoz, E., Shekar, M., Victora, C., Black, R.: How countries can reduce child stunting at scale: Lessons from exemplar countries. *American Journal of Clinical Nutrition*. 112, 894S–904S (2020). <https://doi.org/10.1093/ajcn/nqaa153>.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

