



Indicators for Forming Financial Independence, Social Capital and Human Capital Group of Women Fishermen at Balekambang-Kondangmerak Beach, Malang Regency, East Java

Ayu Agus Tya Ningsih¹ and Sukma Perdana²

^{1,2} Accounting Study Program, Faculty of Economics and Business, Wisnuwardhana University, Malang-Indonesia

ayoe.agustya@gmail.com

ABSTRACT

The significance of coastal women or fishermen's wives in coastal communities lies in their position and role within the sexual division of labour. They actively contribute to socio-economic activities on land within fishing villages. Female fishermen's degree of financial autonomy is impacted by elements related to social capital and human capital. The conjunction of social capital and human capital contributes to entrepreneurial success by allowing both forms of capital to play a significant role. This research aims to analyze the factors that influence the social capital, human capital, and financial independence of female fishermen at Balekambang Kondangmerak beach, located in Malang Regency, East Java. The investigation employed Structural Equation Modeling software, specifically utilizing confirmatory factors. The confirmatory factor analysis results indicate that the current financial condition is the most influential indicator for achieving financial independence. In terms of the social capital variable, building trust has the greatest contribution. Additionally, the knowledge indicator has the strongest impact on the human capital variable.

Keywords: Financial Independence, Social Capital, Human Capital, Confirmatory Factor Analysis

1. INTRODUCTION

Indonesia is the largest archipelagic country in the world and has marine and fisheries potential which can become an economic source for fishing communities. Based on data from BPS in 2022, it is stated that in 2010 the number of fishermen in Indonesia was recorded at 2.16 million people. The economic situation is unstable and the husband's income as a fisherman is relatively low and uncertain, the only person who can help maintain the family's livelihood is the fisherwoman (fisherwoman's wife). Uncertain economic conditions, increasingly limited job opportunities due to increasingly fierce competition, increasing prices of necessities, and family incomes that tend not to increase will result in disruption of the family's economic stability. This condition encourages housewives who previously only worked in the domestic sector to participate in the public sector by contributing to supporting the family economy [1].

The function of women as economic providers is categorized into three distinct roles, as identified [2] 1) Domestic refers to the role of a woman (wife) who is primarily responsible for managing the household, cooking, doing laundry, providing guidance to the children, and taking care of their needs. 2) Production refers to the economic activity conducted by female fishermen to produce income. These activities encompass the acquisition and sale of fish, as well as the preservation, salting, and bundling of seaweed. 3) Socialization refers to the activities in the community that female fishermen take part in. Such as social events or other organized associations. [3] asserts that women play a crucial role in coastal development due to their strategic involvement in fisheries and marine-based activities. As an illustration, women have a substantial impact in many roles such as retailers, fish collectors, wholesalers, wage labourers, and fish processing workers. There has been limited discussion on some areas of research or coastal development projects related to women.

Financial Independence was very important in ensuring the economic sustainability of families and fishing communities as a whole. Although often considered part of a more traditional society and tied to domestic roles, fisherwomen have great potential to become powerful agents of economic change in their communities. Financial independence or well-being reflects the quality of an individual's life with all the related factors that influence it. The development of research on financial well-being will motivate individuals to achieve financial well-being which is also an individual's life goal [4]. [5] financial well-being means the perception of the ability to maintain the current standard of living with financial freedom. In this case, individuals and their families are described as having a sustainable life, namely having sufficient income and savings for daily living needs and being able to avoid debt. [6] Financial well-being indicators are demonstrated by self-assurance in one's financial state resulting from their business, a feeling of stability in their present financial circumstances, comprehension of debt philosophy, and recognition of the future value

© The Author(s) 2024

I. Zutiasari et al. (eds.), *Proceedings of the 4th Business Innovation Sustainability and Technology International Conference (BISTIC 2024)*, Advances in Economics, Business and Management Research 307,

https://doi.org/10.2991/978-94-6463-576-8_14

of money. The indicators of financial independence used in this study include present financial conditions, savings, financial management skills, and financial stability, as identified by [7], [8], [9], [10], [6]

Social capital is a value that encourages human relations between two or more people. Social capital is often and unintentionally used by farmers for their every need [11]. [12] stated that the existence of social capital has a big influence on female fishermen. Utilization of social capital can increase income through collaborative relationships with various parties and obtain solutions to various problems faced [13]. So it can be said that social capital is a person's ability to establish relationships and networks with individuals or groups. Indicators of social capital include trust, social relationships, and social norms [14]. In this study, the notion of social capital as defined by [15] is employed. Social capital is divided into three dimensions: structural, cognitive, and relational. The relational dimension pertains to the establishment of trust, friendship, respect, and sustainable engagement among all persons involved in social capital [15], [16]. [17] identified the primary factors that contribute to social capital, as well as the three distinct dimensions of social capital: cognitive, structural, and relational. Networks of social capital enable the utilization of strategic and potential resources by individuals and community groups. These resources might take the shape of raw material networks, market networks, knowledge networks, and sources of capital [18]. In this study, social capital indicators encompass the capacity to foster collaboration, establish trust, and engage in local community activities.

Proper management of human resources will help the productivity of farming activities. Human capital has an important role in the creation of economies and businesses [19]. The importance of human capital as a dimension of intellectual capital is based on human knowledge and experience so that it can influence the value of the business undertaken. Human capital plays a role in efforts to increase capabilities in developing business opportunities and encouraging the accumulation of modern skills, knowledge, and attitudes or actions of business actors [20]. [21] human capital indicators consist of knowledge, education, and skills. [22] Human capital is an intellectual dimension consisting of knowledge capital and experience capital. Human capital plays an important role in efforts to improve capabilities and develop business opportunities. Furthermore, [23] explains that the essence of human capital is the potential that exists in a person which includes knowledge, abilities, and skills. [24] states that social capital indicators include skills, innovation, creativity, life experience, and knowledge.

Based on the research background, we are interested in conducting an analytical study using factor analysis to determine indicators that contribute to financial independence, social capital, and human capital.

2. METHODS

The population of this research is female fishermen on Balekambang-Kondangmerak Beach, Malang Regency, East Java, who have businesses such as: selling fish at the fish market, stalls that provide fish dishes, and are members of an association with 102 members. Sampling was taken using a Raosoft calculator, so the total sample was 42 members of the Women Fishermen's Association.

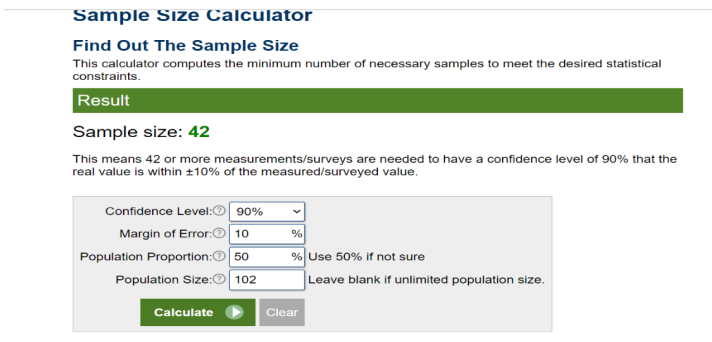


Figure 1. Sample Size Calculator

The sampling technique was carried out by *multistage random sampling*, namely determination samples are based on a multilevel division of an area, then taken randomly for each area. The sample size is calculated using the Raosoft sample size calculator with a sampling error rate of 10%, the sample size was 42. The factor analysis technique used was a confirmatory factor (CFA) with Structural Equation Modeling (SEM) analyzing indicators that play a role and contribute to the variables of financial independence, social capital and human capital.

Instrumental measurements of variables and indicators in this research are described in three variables, namely financial independence, social capital and human capital. Variable and indicator instruments are explained as follows:

Table 1. Variable instruments and indicators

No	Variable	Indicator	Items	Source
----	----------	-----------	-------	--------

1	Financial Independence	Current Financial Condition	<ul style="list-style-type: none"> a. Currently has a healthy financial condition b. Feel comfortable dealing with the current financial situation (income, debt levels and business maintenance). 	[6], [9], [10]
		Financial management skills	<ul style="list-style-type: none"> a. Can earn income from his business to achieve financial goals. b. Have the ability to cover business costs without borrowing c. Have the ability to overcome and control financial problems 	
		Financial Stability	<ul style="list-style-type: none"> a. Have a perception of the financial adequacy (stability) of their business. b. Have financial resources to manage the business 	
2	Social Capital	Ability to build collaboration	<ul style="list-style-type: none"> a. Able to work with fellow female fishermen b. Collaborate with suppliers and customers 	[15], [16], [17], [18]
		Ability to build trust	<ul style="list-style-type: none"> a. Able to build trust between fishermen in building their business b. Able to build trust with customers. c. Able to take a friendly, warm, and personal approach with various parties to build trust. 	
		Participation in local society	<ul style="list-style-type: none"> a. Socialize with the surrounding community to support the smooth running of the business b. Set aside some of my profits for local community activities 	
3	Human Capital	Knowledge	<ul style="list-style-type: none"> a. apply the business development knowledge of other people who have been successful in my business b. Business/entrepreneurship knowledge is useful for running a business well 	[21], [22], [23], [24]
		Skills	<ul style="list-style-type: none"> a. Financial management skills in business development b. Communication skills are useful in business 	
		Ability	<ul style="list-style-type: none"> a. able to manage business risks well. b. Able to find solutions to every business problem 	

3. RESULT AND DISCUSSIONS

The description of the respondents from 42 members of the fishermen's women's association who became the research respondents was 35-50 years old with the last education of the majority of high school as well as the measurement of the type of business and the length of business of the respondents also explained that the majority had a food stall business with a minimum business duration of 3-5 years. The measurement results of the dimensions or variable indicators that can form latent variables with CFA are explained as follows:

Results of Confirmatory Factor Analysis of Financial Independence Variables

Determining the indicators of the financial independence variable is based on the factor loading value. A summary of the CFA test results on the indicators that form the financial independence variable appears in Table 2 and Figure 1.

Table 2 Factors Loading (λ) Measuring Financial Independence Variables

Variables and Indicators		FL
Financial Independence	-> Current Financial Condition	0.960
Financial Independence	-> Financial Management Skills	0.930

Financial Independence	->	Financial Stability	0.706
------------------------	----	---------------------	-------

Meanwhile, the image of the confirmatory test of financial independence based on the Factor Loading value is seen from the following CFA test results:

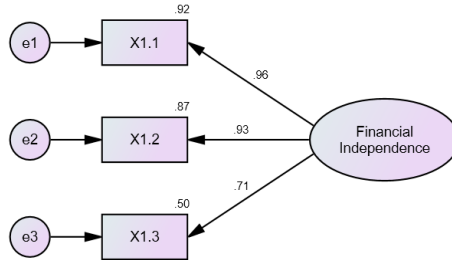


Figure 1. Confirmatory Factor Analysis (CFA) of Financial Independence

Table 2 and Figure 1 provide evidence that the current financial condition is the indication with the highest factor loading (FL) value of 0.960, making it the most significant variable in determining financial independence. Therefore, all of these factors are crucial for establishing financial Independence. This is in line with the conditions in the fishing village of Balekambang-Kondangmerak Beach, Malang Regency.

Based on *Confirmatory Factor Analysis*, Current financial conditions are the biggest indicator that shapes financial independence, followed by financial management skills and financial stability in the group of female fishermen from Balekambang-Kondangmerak Beach, Malang Regency, East Java. These results provide financial meaning at this time which is important to explain and prove that female fishermen are independent and prosperous in financial terms. The current healthy financial condition of being able to meet the needs of the family, being able to finance business operations, and paying for all needs reflects financial independence. Comfortable financial conditions, with income that they can always get without knowing the season or beach conditions because as fishermen they are very dependent on natural factors and weather, reducing debt that previously always trapped them and being able to develop their business.

Results of Confirmatory Factor Analysis of Social Capital Variables

Determining the indicators of the social capital variable is based on the factor loading value. A summary of the CFA test results on the indicators that form the social capital variable appears in Table 4.3 below.

Table 3 Factors Loading (λ) Measuring Social Capital Variables

Variables and Indicators		FL
Social Capital	-> Building collaboration	0.696
Social Capital	-> Building Trust	0.906
Social Capital	-> Local Community Participation	0.735

Source: Processed Primary Data

Meanwhile, the image of the confirmatory test of social capital based on the Factor Loading value is seen from the following CFA test results:

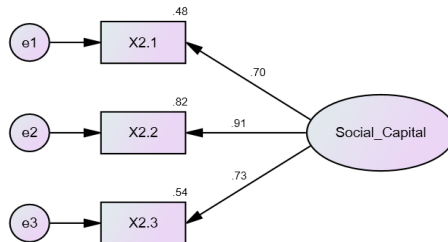


Figure 2. Confirmatory Factor Analysis (CFA) of Financial Behavior

Table 3 demonstrates that the indicators comprising the social capital variable have a factor loading (FL) value of 0.906 for creating trust, with local community participation and building collaboration following closely. Therefore, the indicators that provide the most significant contribution are related to establishing trust.

Building trust makes the biggest contribution to the social capital of the members of the Balekambang-Kondangmerak Beach Fishing Association, Malang Regency, this is due to the culture of female fishermen working together to help collaborate and build trust in improving the economy and building businesses for the welfare of their families. Trust between female fishermen is high by helping each other to improve their businesses, especially community members building businesses, whether opening stalls, auctioning fish they catch, or renting tents and rooms for visitors who come to Kondangmerak beach. Apart from that, customer trust in female fishermen from Kondangmerak Beach, Malang Regency is always an added value for businesses run by female fishermen. Some of them already have customers who are always loyal, visiting the businesses that fisherwomen run, whether they are customers at restaurants, tent rentals or accommodation. Kondangmerak Beach Fishing Women always provide excellent service to their customers with a friendly, warm, and personal family approach so that visitors feel comfortable and satisfied.

Results of Confirmatory Factor Analysis Human Capital Variables

Determining the indicators of the human capital variable is based on the factor loading value. A summary of the CFA test results on the indicators that form the human capital variable appears in Table 4 below

Table 4 Factors Loading (λ) Measuring Financial Security Variables

Variables and Indicators			FL
Human Capital	->	Knowledge	0.775
Human Capital	->	Skills	0.630
Human Capital	->	Ability	0.720

Source: Processed Primary Data

Meanwhile, the image of the human capital confirmatory test based on the Factor Loading value is seen from the following CFA test results:

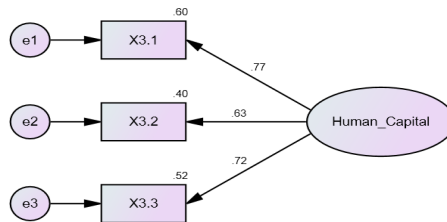


Figure 3. Confirmatory Factor Analysis (CFA) of Human Capital

Based on Table 4, it can be explained that the indicators that form the human capital variable have a knowledge factor loading (FL) value of 0.775 followed by skills and will.

Thus, all the indicators with the greatest contribution are knowledge which contributes to the human capital of the Kondangmerak fisherman women's community, Malang Regency. These results provide meaning that the female fishermen of Kondangmerak, Malang Regency, East Java, with the knowledge they have from the results of monthly meetings with discussion group forums that they hold to be successful in running their business and entrepreneurship by doing things that are useful for developing their business, can utilize resources available at Kondangmerak Beach, Malang.

The existence of this test also has an influence on financial independence in fisherwomen, the existence of financial stability also has an influence even though it is small. Good financial management will create trust and abilities that shape human capital and social capital so that they are able to be independent in managing finances.

4. CONCLUSION

Factor analysis using Structural Equation Modeling (SEM) which tests indicators that contribute to each variable, namely independence, social capital and human capital. The indicator that makes the biggest contribution to financial independence is the current financial condition, while the one that makes the biggest contribution to the social capital variable is the ability of female fishermen to build trust. Knowledge has the greatest contribution in forming human capital variables in female fishermen at Kondangmerak Beach, Malang Regency, East Java.

Confirmatory testing is an alternative for discussing and studying the contributions that makeup research variables. This testing provides input for related parties in addition to hypothesis testing that confirms relationships and influences, but confirmatory can explain indicators that provide the smallest and largest contributions. So that the smallest contribution can provide information on improvement steps, for example, financial independence which provides the smallest contribution is the indicator of financial stability in the female fishermen of Balekambang

Kondang Merak Beach, Malang Regency. Financial stability provides the smallest contribution due to business finances fluctuating even though their business operations continue to run with financial resources that depend on the condition of Kondang Merak beach visitors and the weather on the beach. Good financial management is needed for members of the Kondang Merak Women Fishermen Association, Malang Regency.

ACKNOWLEDGMENTS

Thank you to the Ministry of Education and Culture, Higher Education, who fully funded this research through the Beginner Lecturer Research Grant.

AUTHORS' CONTRIBUTIONS.

The purpose of this study was to investigate the relationship between financial independence and success among the fishermen of Balekambang Kondang Merak Beach, located in Malang Regency, East Java. The study also explored the role of social capital and human capital, specifically the contributions made by female members of the fishermen's pay. The researchers employed several methods such as group discussion forums, structured interviews, observations, and questionnaire distribution to conduct their research.

REFERENCES

- [1] F. Rahmawati and E. Karmeli. (2022). Peranan Perempuan Pesisir Dalam Meningkatkan Ekonomi Rumah Tangga. *Jurnal Riset dan Kajian Manajemen*, vol. 2, no. 1, pp. 90–99. [Online]. Available: <http://ejournalppmunsa.ac.id/index.php/samalewaPp.90-99>
- [2] Z. Zahro and R. Ulum. (2022). Peran Perempuan dalam Meningkatkan Kesejahteraan Ekonomi Keluarga. *Jurnal Pendidikan Ekonomi Undiksha*, vol. 14, no. 1, pp. 182–189. doi: 10.23887/jjpe.
- [3] Raodah. (2013). Peranan Istri Nelayan Dalam Meningkatkan Ekonomi Keluarga Di Kelurahan Lapulu Kota Kendari Provinsi Sulawesi Tenggara. *Jurnal Bina Praja*, vol. 5, no. 2, pp. 79–90.
- [4] K. H. Ngamaba, C. Armitage, M. Panagioti, and A. Hodkinson. (2020). How closely related are financial satisfaction and subjective well-being? Systematic review and meta-analysis. *Journal of Behavioral and Experimental Economics*, vol. 85, Apr. 2020, doi: 10.1016/j.socec.101522.
- [5] E. C. Brüggen, J. Hogreve, M. Holmlund, S. Kabadayi, and M. Löfgren. (2017). Financial well-being: A conceptualization and research agenda. *J Bus Res*, vol. 79, pp. 228–237, Oct. 2017, doi: 10.1016/j.jbusres.2017.03.013.
- [6] Sumani and A. Roziq. (2020). Cite this article as: Sumani and A. Roziq. 2020. Financial Literation: Determinants of Financial Well-Being in the Batik Small and Medium Industries in East Java. *Journal of Applied Management (JAM)*, vol. 18, no. 2, pp. 289–299. doi: 10.21776/ub.jam.2020.018.
- [7] N. Renaldo, S. Sudarno, and H. Br. Marice. (2020). The Improvement Of Generation Z Financial Well-Being In Pekanbaru. *Jurnal Manajemen dan Kewirausahaan*, vol. 22, no. 2, pp. 142–151, Sep. doi: 10.9744/jmk.22.2.142-151.
- [8] M. F. Sabri, C. C. Cook, and C. G. Gudmunson. (2012). Financial well-being of Malaysian college students. *Asian Education and Development Studies*, vol. 1, no. 2, pp. 153–170, May 2012, doi: 10.1108/20463161211240124.
- [9] E. Adam, R. Panjaitan, T. Sumarlin, and M. Andriana. (2012). Financial Well-Being Resilience : Financial Literacy and Financial Inclusion Toward Financial Attitude. *Majalah Ilmiah Bijak*, vol. 18, no. 1, pp. 1–10, 2021, [Online]. Available: <http://ojs.stiami.ac.id>
- [10] N. Delafrooz and L. H. Paim. (2011). Determinants of financial wellness among Malaysia workers. *African Journal of Business Management*, vol. 5, no. 24, pp. 10092–10100. doi: 10.5897/ajbm10.1267.
- [11] P. Z. Rahmadi and B. Santoso. (2016). Modal Sosial Petani Sawah Berlahan Sempit dalam Pemenuhan Nafkah Rumah Tangga. *Jurnal Analisa Sosiologi*, vol. 5, no. 1, pp. 62–73, 2016.
- [12] B. W. Aziz, T. Kasnawi, and Sakaria. (2019). Modal Sosial Petani dalam Peningkatan Produktifitas Pertanian di Kelurahan Biraeng Kecamatan Minasate'ne Kabupaten Pangkep. *Hasanuddin Journal of Sociology (HJS)*, vol. 1, no. 1, pp. 66–74.
- [13] F. N. Lulun, A. M. Sahusilawane, and J. D. Sivalette. (2019). Pengaruh Modal Sosial Terhadap Tingkat Pendapatan Petani Di Desa Waiheru Kecamatan Baguala Kota Ambon The Influence Of Social Capital To The Level Of Income Of

- Farmer In Waiheru Village Baguala District Ambon City. *AGRILAN : Jurnal Agribisnis Kepulauan*, vol. 7, no. 2, pp. 120–134, 2019.
- [14] P. A. Utami, Suminah, and E. Rusdiyana. (2023). Pengaruh Human Capital dan Social Capital terhadap Kemandirian Petani Jamur Tiram di Kecamatan Karangpandan, Kabupaten Karanganyar,” *JURNAL TRITON*, vol. 14, no. 1, pp. 188–201, Jun. doi: 10.47687/jt.v14i1.316.
- [15] C. J. Gelderman, J. Semeijn, and P. P. Mertschuweit. (2016). The impact of social capital and technological uncertainty on strategic performance: The supplier perspective. *Journal of Purchasing and Supply Management*, vol. 22, no. 3, pp. 225–234, Sep. doi: 10.1016/j.pursup.2016.05.004.
- [16] P. Kale, H. Singh, and H. Perlmutter. (2000). Learning and Protection of Proprietary Assets in Strategic Alliances: Building Relational Capital Article in Strategic Management Journal,” *Strategic Management Journal*, vol. 21, pp. 217–237. doi: 10.1002/(SICI)1097-0266(200003)21:33.3.CO;2-P.
- [17] S. Camps and P. Marques. (2013). Exploring how social capital facilitates innovation: The role of innovation enablers,” *Techonol Forecast Soc Change*, vol. 88, pp. 325–348, Oct. 2014, doi: 10.1016/j.techfore.2013.10.008.
- [18] A. Maika and E. Kiswanto. (2016) Pemberdayaan Perempuan Miskin Pada Usaha Kecil Di Perdesaan Melalui Layanan Lembaga Keuangan Mikro,” *Populasi*, vol. 18, no. 1, pp. 65–84, Jul. doi: 10.22146/jp.12073.
- [19] B. Supeno. (2018). Analisis Pengaruh Modal Manusia, Modal Pelanggan, Modal Struktural terhadap Kinerja Usaha Ekonomi Kelurahan Simpan Pinjam di Pekanbaru,” *INOBISS: Jurnal Inovasi Bisnis dan Manajemen Indonesia*, vol. 1, no. 4, pp. 445–461, 2018.
- [20] I. K. E. Atmaja, I. G. A. Pumamawati, and E. Sujana. (2020). Pengaruh Modal Sosial, Modal Manusia, Biaya Transaksi Terhadap Kesuksesan Umkm Industri Seni Lukisan Di Kabupaten Buleleng. *Jurnal Ilmiah Mahasiswa Akuntansi Universitas Pendidikan Ganesha*, vol. 11, no. 3, pp. 374–384,
- [21] R. Fernanda and E. M. Sagoro, “Pengaruh Kompensasi, Kepuasan Kerja, Motivasi Kerja Dan Gaya Kepemimpinan Terhadap Kinerja Karyawan,” *Jurnal Nominal*, vol. 5, no. 2, pp. 81–95, 2016.
- [22] A. M. Mushref, “The moderator role of organizational culture between intellectual capital and business performance: An empirical study in Iraqi industry,” *NetJournals*, vol. 2, no. 3, pp. 82–91, 2014.
- [23] R. A. Amalia, S. Echdar, and S. Kitta, “Pengaruh Human Capital, Social Capital Dan Organizational Capital Terhadap Kinerja Karyawan Di Bank Bri Cabang Bulukumba,” *Jurnal Magister Manajemen Nobel Indonesia*, vol. 3, no. 4, pp. 564–574, 2022.
- [24] J. R. Schermerhorn and D. G. Bachrach, *Exploring Management*, Sixth. Hoboken: Kepler Std Regular at Aptara, Inc., 2015.

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.

