



The Influence of Cultural Responsive Teaching (CRT) on Students' Learning Motivation in the Material of Underhand Passing in Volleyball at SMA N 2 Semarang

Bagas Indra Kurniawan¹, Utvi Hinda Zhannisa², Lukas Waskitho's Story³

^{1,2} Universitas PGRI Semarang, Jawa Tengah, Indonesia

³ SMA Negeri 2 Semarang, Jawa Tengah, Indonesia

Received: 20-05-2025

Revised: 25-06-2025

Accepted: 30-06-2025

Abstract: Education is one of the important factors in human life to provide life provisions through various learning processes, including physical education, sports, and health. However, physical activity in children is still relatively low, which is a global problem, one of which is the lack of motivation for children to exercise. For this reason, a study was conducted that applied the Culturally Responsive Teaching (CRT) approach in learning underhand passing in volleyball. This study aims to determine the extent to which this approach can increase students' learning motivation. This study was conducted at SMA N 2 Semarang using the classroom action research (CAR) method, which was carried out in two cycles. The subjects of the study were students in class X-10 at school b. The results of the study showed that in cycle I, students' learning motivation was recorded with an average score of 120.27, and experienced a significant increase in cycle II to 141.92, with a percentage increase of 18%. Based on these findings, it can be concluded that the application of the Culturally Responsive Teaching (CRT) approach in class X-10 SMA N 2 Semarang is effective in increasing students' learning motivation in PJOK subjects. Therefore, the CRT approach can be recommended as an alternative in PJOK learning

Keywords: Cultural Responsive Teaching; Learning Motivation; Underpassing

Correspondence author

Email: bagasputra0950@gmail.com

Copyright © 2025 Bagas Indra Kurniawan¹, Utvi Hinda Zhannisa², Lukas Waskitho's Story³



INTRODUCTION

Education plays an important role in the development of a country and the survival of a nation, because it is a means to improve the quality of human resources (HR). Education has a central position in every sector of development. Therefore, education is one of the crucial factors in human life to provide the necessary provisions in living life. To prepare the next generation of the nation that is qualified at the global level, the world of education needs to prepare students who have good motivation, performance, and thinking skills. (Maulana & Odang, 2019; Karo Karo, A. A. P., Sari, L. P., & Hendrawan, D., 2025). The quality of students can be supported by their abilities in three aspects, namely cognitive, affective, and psychomotor. Abilities in the psychomotor aspect, for example, can be improved through sports activities. Sports are activities that aim to improve students' skills through structured movements. (Soemaryoto & Nopembri, 2018). Regular exercise provides positive benefits for the body, making it fitter. However, according to Pramadya Hardiansyah's research, physical activity in children in Indonesia

is still relatively low, with only 32.9% of children being active. This problem shows that children's motivation to exercise is still very lacking. (Syarifudin & Mikroj, 2021).

One of the areas of study that covers these issues is physical education, sports, and health (PJOK). PJOK has become an inherent part of every individual's life, functioning to study various things related to physical, cognitive, and psychomotor aspects in order to achieve the desired goals. (Samsudin, 2014). In this case, PJOK learning can be one of the efforts to develop individual potential. With the design of PJOK subjects, it is hoped that educational goals such as growth and development, increasing physical abilities and skills, intelligence, and character formation and other positive values can be achieved. As stated by Asmajaya (2021), physical education plays an important role in the educational process to educate humans throughout life. (Sriyatin et al., 2018).

According to Winarno, volleyball is a team sport played by six people in each team. (Winarno, 2014). This game can run well if each player at least masters the basic techniques of volleyball. Meanwhile, Sanchez (2014) stated that volleyball is a sport characterized by general movements, such as jumping, arm strokes, and fast movements. Attacking and blocking are very important elements in volleyball to achieve victory, especially in high-level competitions. (Alwijaya, 2018). The underhand passing technique in volleyball is generally used to receive the ball that comes and moves downwards. (Tarigan & Raharjo, 2023). This technique functions as a defensive fortress to withstand smashes from opponents. In addition, underhand passing is also used to receive, hold, and control the service ball thrown by the opponent. To perform this technique, the hand position should be below, using one or two hands. (Simbolon & Sari, 2022). In addition to mastering the technique, solid teamwork is also very necessary in implementing this underhand pass. (Putra & Sistiasih, 2021).

Effective and interactive learning can make PJOK learning activities more interesting. When learning activities feel interesting to students (Simbolon & Sari, 2022), they will be more motivated to be active in participating in PJOK learning. This motivation can be obtained by using a learning approach related to the environment around the students. (Irwanto, 2017). The results of the analysis show that intrinsic motivation has a direct influence on learning behavior, and learning behavior also influences learning achievement. (Kurniawan, 2011). Motivation is an internal drive that drives a person to achieve a certain goal. This drive does not only come from within the individual, but can also be influenced by external factors or the surrounding environment. Culturally Responsive Teaching (CRT) is a learning approach that utilizes cultural resources as a basis for learning for students (Aldhe et al., 2024). In helping students better understand their own culture and become more aware of the differences in other cultures, teachers in this approach always incorporate cultural values into the learning process. Teachers must understand that learning involves more than just academic success, learning also involves preserving the cultural identity of students. (Salma & Yuli, 2023). This method enhances students' understanding of their culture while strengthening their bond with the learning environment (Lasminawati et al., 2023).

Learning motivation can be divided into two types, namely extrinsic motivation (which comes from outside the individual) and intrinsic motivation (which comes from within the individual). (Gumilar et al., 2024). Learning motivation itself is the drive to participate in learning with enthusiasm. (Sholikinn, 2019). Extrinsic motivation can be in the form of awards for certain achievements or prizes, while intrinsic motivation comes from the desires and internal drives of the students themselves. (Asnaldi et al., 2018). In this case, the role of the teacher is very important. Therefore, the researcher chose to apply the Culturally Responsive Teaching (CRT) learning model. The CRT learning model

integrates learning concepts with local culture and customs that exist in society. It is expected that by implementing the CRT model, students will be more motivated to learn PJOK. In PJOK learning, the CRT model can be applied through traditional games that can increase students' learning motivation, especially in the material of underhand passing in volleyball games in class X-10 of SMA N 2 Semarang.

Based on the explanation above, from a practical perspective, this study is expected to provide a new perspective to PJOK teachers, by showing that they can apply different learning methods in teaching, based on the Culturally Responsible Teaching (CRT) approach to create better teaching skills.

METHOD

This type of research is Classroom Action Research (CAR), which uses a cyclical flow. Cycle research aims to improve the quality of classroom learning in a sustainable manner. In this study, the author used two cycles. The first cycle identifies problems that will be addressed in the second cycle. Furthermore, after all activities are carried out, a reflection is carried out to assess the changes that occur as an effort to solve the problems found in the first cycle. The purpose of this study was to determine the application of the Culturally Responsive Teaching (CRT) learning approach in improving the learning motivation of class X-10 students at SMA N 2 Semarang. Therefore, the author used a questionnaire technique to collect data in each cycle.

In this study, the author used a non-probability sampling method. Therefore, the author chose class X-10 students at SMA N 2 Semarang as a sample, consisting of 36 students. Data analysis in this study used descriptive statistics, such as mean, standard deviation, percentage, and inferential tests used to test data prerequisites, namely data normality and homogeneity

RESULT AND DISCUSSION

Result

This research was conducted at the sports field of SMA Negeri 2 Semarang along with descriptive data related to learning motivation.

Table 1. Descriptive Statistics

Statistics	Cycle 1	Cycle 2
Mean	27	27
Median	12 0.27	1 41.92
Std. Deviation	29,090	11,916
Range	109	48
Minimum	4 2	1 12
Maximum	1 5 1	1 60

Based on Table 1, it can be concluded that the learning motivation of students in the first cycle for the material of underhand passing in volleyball in class X-10 has an average of 120.7. After the implementation of the *culturally responsive teaching* (CRT) approach for one cycle, the average value obtained increased to 141.92. This shows an increase in student learning motivation after the implementation of the CRT approach. In inferential statistical analysis, normality test and hypothesis test are performed. Normality test is performed using Kolmogorov-Smirnov test with SPSS software version

25 to process data. The purpose of this normality test is to determine whether the research variables are normally distributed. A variable is said to be normally distributed if the significance value (sig) > 0.05, while the variable is considered not normally distributed if the sig value < 0.05.

Table 2. Normality Test

VARIABLES	P	INFORMATION
Cycle 1	0, 000	Normal
Cycle 2	0, 200	Normal

Based on the table above, it is explained that the results of cycle 1 and cycle 2 have a p value (sig) > 0.05 so that a conclusion can be drawn that both related data contribute normally .

Table 3. Hypothesis Testing

VARIABLES	<i>Paired Samples Test</i>	
	<i>Mean</i>	t count t table sig value
Cycle 1	120.27	-3,552 2,059 ,002
Cycle 2	141.92	

Based on the results of the t-test above, the calculated t value is -3.552, while the t-table value is 2.059 (df 25; 0.05), with a significance value of 0.002. From these results, it can be concluded that the calculated t (-3.552) is smaller than the t-table (2.059), and the significance value (0.002) is smaller than 0.05. Therefore, the alternative hypothesis (Ha) is accepted, which indicates a significant difference in learning motivation.

From the results of the analysis, it can be concluded that the application of the CRT learning approach has a significant impact on students' learning motivation, especially in learning volleyball underhand passing .

Table 4. Percentage of Improvement

Cycle 1	Cycle 2	Difference Increase
120.27	141.92	18% 21.65

Based on the results of the table above, it can be concluded that in this study, the application of the *Culturally Responsive Teaching* (CRT) learning approach for two cycles succeeded in increasing the motivation to learn volleyball underhand passing by 18%.

Discussion

From the analysis that has been done, it can be concluded that the implementation of the Culturally Responsive Teaching (CRT) learning approach has a positive impact in increasing students' learning motivation in PJOK subjects, especially volleyball underhand passing material at SMA N 2 Semarang, especially in class X-10. The implementation of the Culturally Responsive Teaching (CRT) learning approach for two cycles succeeded in increasing the motivation to learn volleyball underhand passing by 18%. This increase in learning motivation has also been proven through previous research.

Based on previous research, efforts to improve students' learning motivation can be done through the application of the Culturally Responsive Teaching (CRT) learning approach. The application of the CRT approach has been proven to encourage and

improve students' learning motivation to be more active in PJOK learning activities. This approach stimulates the willingness and motivation of students to participate more in the learning process, which ultimately results in a significant increase in learning motivation, even in the high category. Seeing this, in this study, students' learning motivation also experienced a significant increase, starting from cycle 1 to cycle 2. The data obtained showed that in cycle 1, the value of students' learning motivation was 120.27, while in cycle 2, the value increased to 141.92, with a percentage increase of 18%.

The Culturally Responsive Teaching (CRT) approach makes a major contribution to students' learning motivation by connecting learning materials to students' cultural backgrounds. In physical education, for example, the integration of traditional games or regional sports makes students feel valued and more involved. When students see that learning is relevant to their identity, they are more motivated to actively participate and achieve learning goals. (Rochim, 2023). CRT also encourages a sense of pride in local culture, which indirectly increases enthusiasm for learning. (Elfina et al., 2023).

High learning motivation has a direct impact on learning outcomes, both cognitively and psychomotorically. With the CRT approach, students are more inspired to understand physical education concepts related to their culture, so that cognitive learning outcomes increase. In addition, active involvement in culturally based physical activities, such as movements or techniques from traditional sports, improves students' psychomotor abilities. This relationship shows that CRT not only supports learning motivation but also helps students achieve their maximum potential. (Lasminawati et al., 2023).

Irawan et al., (2024) explained that the CRT approach helps shape the character of high school students through physical education by teaching values such as cooperation, tolerance, and sportsmanship. By utilizing the cultural context in learning, students learn to appreciate diversity, both within their group and in the wider society. In addition, CRT teaches students the importance of maintaining cultural identity while remaining open to global values. This character is very relevant to forming a young generation that is not only physically competent but also has a high social awareness.

CRT-based learning in physical education serves as an effective medium for shaping students' identity. By introducing games or sports activities that originate from local culture, students learn to understand and love their own identity. In addition, CRT also builds a sense of responsibility and discipline through collaborative activities, such as team games. With this approach, physical education is not only a means to improve physical skills but also a tool to instill moral and social values that support the formation of students' identity. Based on this, it can be concluded that students' learning motivation is a very important factor in the world of education. Therefore, a learning approach is needed that can increase learning motivation, one of which is by implementing the CRT approach, which has proven effective in this study.

CONCLUSION

Based on the results of the study, it can be concluded that the application of the Culturally Responsive Teaching (CRT) approach in class X-10 of SMA N 2 Semarang has succeeded in increasing students' learning motivation in the PJOK subject. This can be seen from the results of data processing and changes in student behavior during the learning process. As a follow-up, teachers can develop learning by utilizing local culture or culture in the school environment as a source of learning, to further increase student involvement and motivation in learning.

ACKNOWLEDGEMENTS

Acknowledgments to SMA N 2 Semarang helped conduct research.

CONFLICT OF INTEREST

Clearly explain whether there are any conflicts of interest related to the reported research.

REFERENCES

- Adhi Putra, Y., & Sistiasih, V. S. (2021). Modifikasi Pembelajaran Permainan Bola Voli. *Jurnal Porkes*, 4(2), 126–133. <https://doi.org/10.29408/porkes.v4i2.4705>
- Aldhe, A., Indahwati, N., & Tarigan, C. A. (2024). Pengaruh Model Pembelajaran Culturally Responsive Teaching (CRT) Terhadap Motivasi Belajar Passing Bola Voli. *Jurnal Mahasiswa Pendidikan Olahraga*, 5(1), 384–394.
- Alwijaya, M. E. (2018). Penerapan Metode Drill Untuk Meningkatkan Hasil Belajar Passing Bawah Bola Voli Siswa Kelas VII.A Smp Negeri 2 Batukliang. *Jurnal Ilmiah Mandala Education*, 4(3), 172–184.
- Asnaldi, A., Zulman, & Madri, M. (2018). Hubungan Motivasi Olahraga Dan Kemampuan Motorik Dengan Hasil Belajar Pendidikan Jasmani Olahraga Dan Kesehatan Siswa Sekolah Dasar Negeri 16 Sintoga Kecamatan Sintuk Toboh Gadang Kabupaten Padang Pariaman. *Jurnal MensSana*, 3(2), 16. <https://doi.org/10.24036/jm.v3i2.75>
- Elfina, J., Hala, Y., & Herawati. (2023). Implemtasi Model PjBL (Projek Based Learning) dengan Pendekatan CRT (Culturally Responsive Teaching) Terhadap Hasil Belajar Biologi di Kelas X2 UPT SMA Negeri 10 Makassar. *Jurnal Pemikiran Dan Pengembangan Pembelajaran*, 5(3), 596–603. <https://edukatif.org/index.php/edukatif/article/view/5294/pdf>
- Gumilar, R. C., Permadi, A. A., & Kurniawati, A. (2024). Motivasi Siswa Dalam Mengikuti Kegiatan Ekstrakurikuler Bola Voli Di Ma Al- Manaar Muhammadiyah. *JUMPER : Jurnal Mahasiswa Pendidikan Olahraga*, 4(3), 1–16.
- Irawan, B., Indahwati, N., & Taringan, C. A. (2024). Penerapan Pendekatan Cultularry Responsive Teaching (Crt) Pada Pembelajaran Passing Permainan Sepak Bola Untuk Meningkatkan Motivasi Belajar Peserta Didik. *Jumper: Jurnal Mahasiswa Pendidikan Olahraga*, 5(2), 425–433.
- Irwanto, E. (2017). Pengaruh Metode Resiprokal dan Latihan Drill Terhadap Peningkatan Keterampilan Teknik Dasar Bolavoli. *Jurnal Pendidikan Olahraga*, 6(1), 10–20. <http://www.journal.ikipgriptk.ac.id/index.php/olahraga/article/view/570>
- Karo Karo, A. A. P., Sari, L. P., & Hendrawan, D. (2025). Integration of 4C Skills in Physical Education Learning Strategy Module. *Jurnal Pedagogi Dan Pembelajaran*, 8(1), 108–115. <https://doi.org/10.23887/jp2.v8i1.77515>
- Kurniawan, W. (2011). Pengaruh Media Pembelajaran Gambar Bergerak Terhadap Hasil Belajar Passing Bawah Bola Voli Pada Siswa Putra Kelas VIII MTs Negeri Mantingan Ngawi. In *Jurnal Pendidikan Olahraga dan Kesehatan*. Universitas Sebelas Maret.
- Lasminawati, E., Kusnita, Y., & Merta, I. W. (2023). Meningkatkan Hasil Belajar dengan Pendekatan Pembelajaran Culturally Responsive Teaching Model Probem Based Learning. *Journal of Science and Education Research*, 2(2), 44–48. <https://doi.org/10.62759/jser.v2i2.49>

- Maulana, F., & Odang, A. (2019). Peningkatan Hasil Belajar Pendidikan Jasmani melalui Metode Pembelajaran Penugasan dalam Materi Pembelajaran Senam Lantai pada Siswa Kelas XII IPS 2 SMA N 2 Kota Sukabumi. *Jurnal Kependidikan*, 5(1), 27–34.
- Rochim, M. F. (2023). Peningkatan Keterampilan Passing Bawah Peserta Didik Dalam Permainan Bola Voli Melalui Metode Drill Dengan Bantuan Alat Modifikasi Bola Gantung. *JUMPER (Jurnal Mahasiswa Pendidikan Olahraga)*, 3(2), 52–68.
- Salma, I. M., & Yuli, R. R. (2023). Membangun Paradigma tentang Makna Guru pada Pembelajaran Culturally Responsive Teaching dalam Implementasi Kurikulum Merdeka di Era Abad 21. *Jurnal Teknologi Pendidikan*, 1(1), 1–11. <https://doi.org/10.47134/jtp.v1i1.37>
- Samsudin. (2014). Model Pembelajaran Pendidikan Jasmani. Prenada Media Group.
- Sholikinn, S. (2019). Peningkatan Motivasi Belajar Peserta Didik Kelas V Pada Pembelajaran Online Pendidikan Jasmani Melalui Komik “Budaya Sehat” Di SD Negeri Sekarsuli 1. *Artikel Penelitian Tindakan Kelas*, 402–411.
- Simbolon, E., & Sari, L. P. (2022). Analisis Model Pembelajaran Kooperatif Terhadap Capaian Keterampilan Passing Bawah Bola Voli. *JUMPER: Jurnal Mahasiswa Pendidikan Olahraga*, 2(2), 117–126. <https://doi.org/10.55081/jumper.v2i2.557>
- Soemaryoto, & Nopembri, S. (2018). Pendidikan Jasmani, Olahraga, dan Kesehatan / Kementerian Pendidikan dan Kebudayaan. Kementerian Pendidikan dan Kebudayaan.
- Sriyatin, S., Sucipto, A., & Sulikan, S. (2018). Peningkatan Hasil Belajar Pendidikan Jasmani Melalui Model Pembelajaran Kooperatif Tipe Jigsaw Siswa Sdn Sambigede 03 Sumberpucung Malang. *JPJOK (Jurnal Pendidikan Jasmani, Olahraga Dan Kesehatan)*, 1(2), 80–91. <https://doi.org/10.33503/jpjok.v1i2.169>
- Syarifudin, & Mikrojo, S. (2021). Buku Panduan Guru Pendidikan Jasmani, Olahraga dan Kesehatan Gizi. Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi.
- Tarigan, G., & Raharjo, F. M. (2023). Upaya Meningkatkan Hasil Belajar Passing Bawah Bola Voli Melalui Gaya Mengajar Inklusi Pada Siswa Kelas XI SMK Swasta Yapim Biru-Biru Tahun Ajaran 2020/2021. *JUMPER (Jurnal Mahasiswa Pendidikan Olahraga)*, 2(1), 8–14.
- Winarno, M. E. (2014). Evaluasi Hasil Belajar Pendidikan Jasmani Olahraga dan Kesehatan. Universitas Negeri Malang.