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WORD COUNT	6570	TIME SUBMITTED	24-MAY-2026 12:40AM
		PAPER ID	121742347

Indonesian Journal of Physical Education and Sport Science

IJPESS
Indonesian Journal of Physical Education and Sport Science
p-ISSN 2775-765X | e-ISSN 2776-0200
Volume x, No. x, October 2022 Page. x-xx
http://journal.unucirebon.ac.id/index.php ijpess

Does Kinesiology Taping Enhance Athletic Performance? A Systematic Review of Sprint and Vertical Jump Outcomes

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Received: xx Month 2023, Approved: xx Month 2026, Published: xx Month 2026

Abstract

Study purpose. Examine the effects of Kinesiology Taping (KT) on sports performance in order to evaluate its effectiveness for enhancing performance. However, its effectiveness remains controversial.

Objective. This systematic review will attempt to clarify the available evidence on the effects of kinesiology taping (KT) on sprint and vertical jump performance in athletes.

Materials and methods. In order to evaluate the effects of KT on sprint and jump performance in athletes, a systematic search for prospective as well as retrospective studies was conducted on PubMed and Google Scholar until March 2026. Google Scholar up to March 2026. all the studies which involved athletes, and measured their sprint performance or their vertical jump performance when they had tape on and when they did not have tape on. performance under taped and non-taped conditions. Quality of the included studies was assessed by PEDro scale and effect size was calculated by Cohen's d

Results. Eight studies were investigated for the purpose of this review. Concerning the effect of KT on performance however, many studies have found no effect or mixed results and therefore its effectiveness is still debated. The aim of this review was to investigate the effects of KT on the sprint and vertical jump performance of athletes. meaningful improvement in performance. In contrast, moderate improvements Even for lower quality studies, there were moderate improvements in performance. However, the negative effects on the sprint performance of athletes after the application of KT were even greater in some cases. Some of the included studies reported slight negative effects of KT on sprint performanc

Conclusions. No effect of KT on sprint and jump performance in athletes. sprint or vertical jump performance in athletes. This could be due to limitations and/or biases in the studies.

Keywords: Kinesiology Tape, Sprint performance, Vertical jump performance, Sprint performance, Athlete

DOI: https://doi.org/10.52188/ijpess.v3i1

Introduction

Sports performance is a key determinant of success in competitive athletics, requiring multiple components such as strength, power, speed, agility, flexibility, and endurance (Annino et al., 2023; Ismoko & Putro, 2023; Lau & Cheng, 2019; Muhsin, 2025; Reneker et al., 2018; Suchomel et al., 2016; Veljković et al., 2020). Among these components, sprint performance and vertical jump performance, measures of lower extremities' power and speed of execution, such as parameters of sprinting ability are often used as important indicators for sports such as football, basketball, volleyball and athletics (Lau & Cheng, 2019) . Sprint performance reflects an athlete's ability to accelerate to reach their highest velocity (Cochrane et al., 2023; Hanayoğlu & Can, 2023; Raza et al., 2023; Yuste et al., 2021), while The vertical jump is used as an indicator for the explosive muscle power of athletes, the jump movement involves a rapid contraction of muscles after a stretch-shortening cycle. (Baştürk et al., 2015; Cekmece et al., 2024; Cochrane et al., 2023; Markovic, 2007). Several studies have attempted to establish a closed relationship between jumping performance and sprinting performance (Endrawan et al., 2024; Warman & Henjilito, 2021).

To optimize athletic performance, there are a large number of training methods, including physical training with a physiological focus, nutrition and by means of training aids. (Reneker et al., 2018). External devices and tools used by athletes include for example kinesiology taping (KT) (Lau & Cheng, 2019; Reneker et al., 2018). Kinesiology taping can enhance proprioception, improve muscle activation, increase blood flow, joint stability, reduce pain and allow muscles to function correctly (Annino et al., 2023; Lau & Cheng, 2019; Mitchell et al., 2026; Reneker et al., 2018). Proposed mechanisms of functional change in clinical populations with Kinesio Taping may not translate to enhanced athletic performance (Annino et al., 2023; Baştürk et al., 2015; Cekmece et al., 2024; Cochrane et al., 2023; Michalik & Zakostowicz, 2021; Raza et al., 2023; Yuste et al., 2021).

KT has varying levels of support for improving athletic performance with some findings showing an increase in variables such as balance (Azab et al., 2024; García-Arrabé & Salniccia, 2025; Memon et al., 2025), speed (Michalik & Zakostowicz, 2021), agility (Hanayoğlu & Can, 2023), and power, whereas others have reported no significant effects or even slight performance decrements (Annino et al., 2023; Lau & Cheng, 2019; Reneker et al., 2018) . Differences in findings may be attributed to differences in techniques used for tapping, locations where tapping occurred, duration of tapping, and methods for measuring outcomes. In many previous studies, researchers have focused on a single performance variable, leading to incomplete findings that fail to capture the full range of effects.

Until now no systematic review was carried out which compares the effects of kinesiology taping on the performance of sprint and jump height during sports activities of athletes in general. Therefore, in the context of this review the effects of kinesiology taping on sprint and jump performance of athletes who do sports which require in their training and in their matches and training units frequently sprinting and jumping will be investigated.

The purpose of this review is to evaluate the effects of Kinesiology Taping (KT) on sprint and vertical jump performance in athletes. In order to answer the three research questions, the purpose of this review will be to 1) determine the effects of KT on sprint performance in athletes, 2) determine the effects of KT on vertical jump performance in athletes, and 3) determine the methodological quality and the effects of the studies that investigated the above-mentioned variables.

Materials and methods

This research has been conducted and analyzed in the form of a systematic literature review. The research has been conducted in accordance with the Preferred Reporting Items for

Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines to make the identification process of the studies, the selection process of the studies and the reporting of the studies as transparent and complete as possible (Page et al., 2021). A systematic search of English language studies was conducted using the databases PubMed and Google Scholar until March 2026. The guidelines PRISMA 2020 consist of 27 items in total, for manuscript development as well as for transparent reporting, of which the authors consider 12 to be essential (Page et al., 2021).

1. Eligibility criteria

   The inclusion criteria were as follows: 1) Participants were identified as athletes (including amateurs, recreational, semi-professional, or professional levels); 2) The study design compared kinesiology taping (KT) or other taping methods with non-taped conditions, placebo, or alternative taping techniques; 3) Outcome included sprint and/or vertical jump performance; 4) Articles were published in English and available in full text.

   Studies were excluded if they did not involve athletes, did not assess KT interventions, or did not report sprint or vertical jump outcomes.

2. Information sources

   A systematic search was conducted in two electronic databases: PubMed and Google Scholar in September 2025. The search covered all relevant studies published up to March 2026, with the final search performed on March 28, 2026. The following terms were used to identify the potential studies: 1) “Athlete” or “Athletes”, 2) “sport” or “sports”, 3)” Kinesiology Tape” or “Kinesio tapping” or “taping” 4) “Performance” or “Performances”. The search covered all relevant studies published up to March 2026, with the final search performed on March 28, 2026. The reference lists of included studies were also screened to identify additional relevant articles.

3. Study selection

   All identified records were imported to reference management software, and duplicate studies were removed prior to screening. Screening procedures started with titles, followed by abstract, and then the full text.

   Discrepancies during the selection process were resolved through discussion between reviewers to reach consensus.

4. Data collection

   Data were extracted using standardized data extraction form. The following items was collected from each study; participant characteristics (type of sport, athlete level, and sample size); intervention details (taping location, techniques, and duration of application); comparator conditions (non-taped, placebo, pr alternative taping); outcome measurements (sprint time and vertical jump height); main findings and reported results.

5. Risk of bias in individual studies

   The PEDro Scale was used for evaluation of the included study. 11 standards criteria were used to assess risk bias factors ” (Cashin & Mcauley, 2020). 1 item for external validity items, 8 items for internal validity, 2 items for statistical reporting. These items rated yes or no (1 or 0) according to criterion satisfied in the study. Score was calculated by summing 10 criteria besides the external validity which is criteria number one. Score is arranged by <4 considered “poor” 4-5 considered “fair”, 6-8 considered “good”, and 9-10 considered “excellent” (Cashin & Mcauley, 2020). The term “non-taped condition” was used to describe comparison conditions across studies, including no-tape, baseline, or within-subject comparisons. This term does not necessarily indicate a

randomized control group. The comparison condition in the included studies is referred to as "non-taped condition" and does not always represent a true control group. Any discrepancies were resolved by discussion.

6. Summary Measures

The magnitude of the effect size of KT on sprint and vertical jump performance was quantified using Cohen's *d* effect size to allow comparison across studies with different measurement scales. This measure was selected to standardize the magnitude difference between interventions and comparator groups in the study with different measurements.

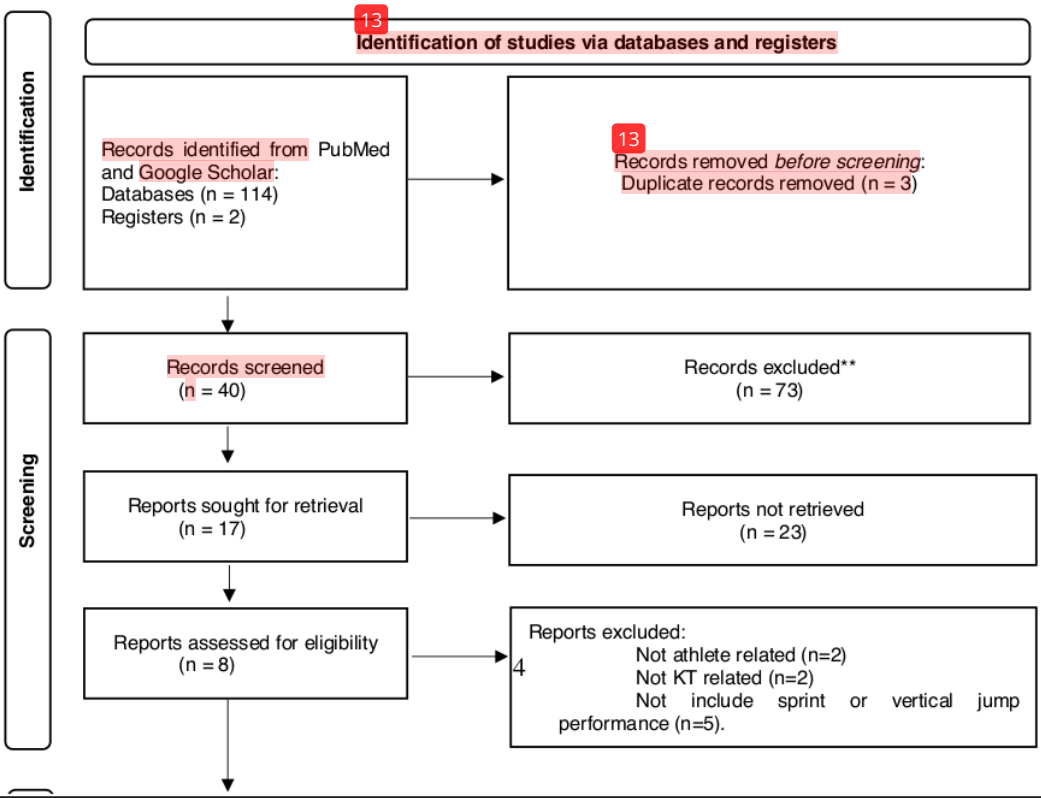
The magnitude of the effect size was interpreted according to Cohen's conventional threshold was as follows: 0.2 small effect, 0.5 moderate effect, and 0.8 large effect (Cohen, 1988). All the effect sizes were categorized based on outcome type (sprint and vertical jump performance) and synthesized descriptively. Additionally, the relationship between methodological quality and reported outcomes was examined to identify potential bias influencing the results

Results

1. Study selection

A total of 111 records were identified through the database after duplicates were removed. After screening titles, 58 studies remained, and 40 studies remained after abstract screening. Of these, 17 articles were assessed for full-text eligibility, resulting in six studies that met the inclusion criteria. An additional two studies were identified through reference screening, yielding a total of eight studies included in this review (Annino et al., 2023; Baştürk et al., 2015; Cekmece et al., 2024; Cochrane et al., 2022; Hanayoğlu & Can, 2023; Michalik & Zakostowicz, 2021; Raza et al., 2023; Yuste et al., 2021).

A flow diagram describing the full procedures was shown in (**Figure 1**).



Source: Primary data, 2026

Figure 1 The flow diagram of study selection procedures

2. Studies characteristics

Eight studies showed variability in terms of outcome measurements, populations, and study location. Most of the studies were conducted in Europe, accounting for six of the studies (Annino et al., 2023; Baştürk et al., 2015; Cekmece et al., 2024; Hanayoğlu & Can, 2023; Michalik & Zakostowicz, 2021; Yuste et al., 2021). Of the remaining two studies, one was conducted in South Africa (Cochrane et al., 2023), while one study did not specify its location (Raza et al., 2023).

Seven studies utilized jump-based outcome measures (Annino et al., 2023; Baştürk et al., 2015; Cekmece et al., 2024; Cochrane et al., 2023; Michalik & Zakostowicz, 2021; Raza et al., 2023; Yuste et al., 2021), while one study is the only exception to jump measurements (Hanayoğlu & Can, 2023). Five studies measured speed-related outcomes (Cochrane et al., 2023; Hanayoğlu & Can, 2023; Michalik & Zakostowicz, 2021; Raza et al., 2023; Yuste et al., 2021). Only one of them did not provide explicit data on sprint performances (Łuczak et al., 2021). The other outcomes in studies, such as flexibility (Annino et al., 2023), balance (Cekmece et al., 2024), and agility (Baştürk et al., 2015; Hanayoğlu & Can, 2023) were also found, the primary focus of this study is only on sprinting performances and vertical jump.

There was a clear distinction in how the studies approached anatomical focus. Two studies have examined specific muscles; one study examined the quadriceps and hamstrings (Annino et al., 2023), while the other one focuses on the quadriceps and the gluteus (Yuste et al., 2021). In contrast, the other remaining studies adopted a broader approach, evaluating the lower limbs as a functional unit. A descriptive table is presented in (Table **1**).

Table 1. Overview of The Included Studies

Study	Methods		Participants			Interventions	
	Test	**Application Interval**	**Athlete Level**	**Population**	**Study Location**	**Taping Location**	**Effect Timing**
(Raza et al., 2023)	CMJ, Sprint	Immediate	Athletes	Soccer players	N/A	Lower limb	Acute
(Annino et al., 2023)	Jump, flexibility	Acute	Athletes	Football players	Italy	Quadriceps/Hamstring	Acute

(Yuste et al., 2021)	CMJ, 20m sprint	Immediate + 24h	Athletes	Soccer players	Spain	Quadriceps + Gluteus	Acute + Short-term
(Baştürk et al., 2015)	Jump, agility	Immediate	Athletes	Football players	Turkey	Lower limb	Acute
(Michalik & Zakostowicz, 2021)	Jump, speed	Multiple time points	Athletes	Male subjects	Poland	Lower limb	Acute + Follow-up
(Hanayoğlu & Can, 2023)	Speed, agility	30min–48h	Athletes	Students	Turkey	Lower limb	Short-term
(Cochrane et al., 2023)	Sprint, jump	Pre-post	Athletes	Rugby players	South Africa	Lower limb	Acute
(Cekmece et al., 2024)	Jump, balance	Immediate	Athletes	Young athletes	Turkey	Lower limb	Acute

Source: Primary Data Processed from(Annino et al., 2023; Baştürk et al., 2015; Cekmece et al., 2024; Cochrane et al., 2023; Hanayoğlu & Can, 2023; Michalik & Zakostowicz, 2021; Raza et al., 2023; Yuste et al., 2021) , 2026

3. Risk of bias studies

The methodological quality of the included studies was tested using the PEDro scale and showed a wide distribution with overall scores between the range 1–7 out of a maximum of 10. According to these scores, two articles were determined to be good quality (PEDro ≥ 6), one to be fair quality (PEDro 4–5), and the rest poor quality (PEDro ≤ 3), and it follows that the overall quality of evidence was essentially low to moderate. Despite this, most studies described eligibility criteria (C1) and statistical reporting (C10) and measures of variability (C11), suggesting that basic reporting standards were generally satisfied. The studies also met baseline comparability, or C4, and random allocation requirements, C2, but not necessarily for all studies. But there were several glaring methodological limitations. Allocation concealment (C3) was not noted in any study, which is a key source of potential selection bias.

Blinding was also not widely performed, especially for therapists (C6), who had no provision for in any study, and for participants (C5) and assessors (C7), who had been observed only in a small number of studies. The specific limitations applied within KT research are particularly relevant due to the visibility of the intervention, making blinding difficult by nature, and increased opportunity for expectation/placebo effects. Moreover, while the majority of cases reported between-group contrasts between these 2 conditions, a non-taped condition in the comparison condition is often assumed, which does not indicate the true comparison group and may affect internal validity. Inadequate

intention-to-treat analysis (C9) and follow-up reporting not considered (C8) in some of the studies also resulted in an increased risk factor for bias. Overall, the PEDro profile in (Figure 2) indicates that while reporting quality was broadly acceptable, some of the most salient internal quality aspects (e.g., allocation concealment and blinding) were not adequately tackled. Nevertheless, this methodological inconsistency may partially account for the variation of outcomes reported and for the trend of reporting better effects of KT in poorer quality studies.

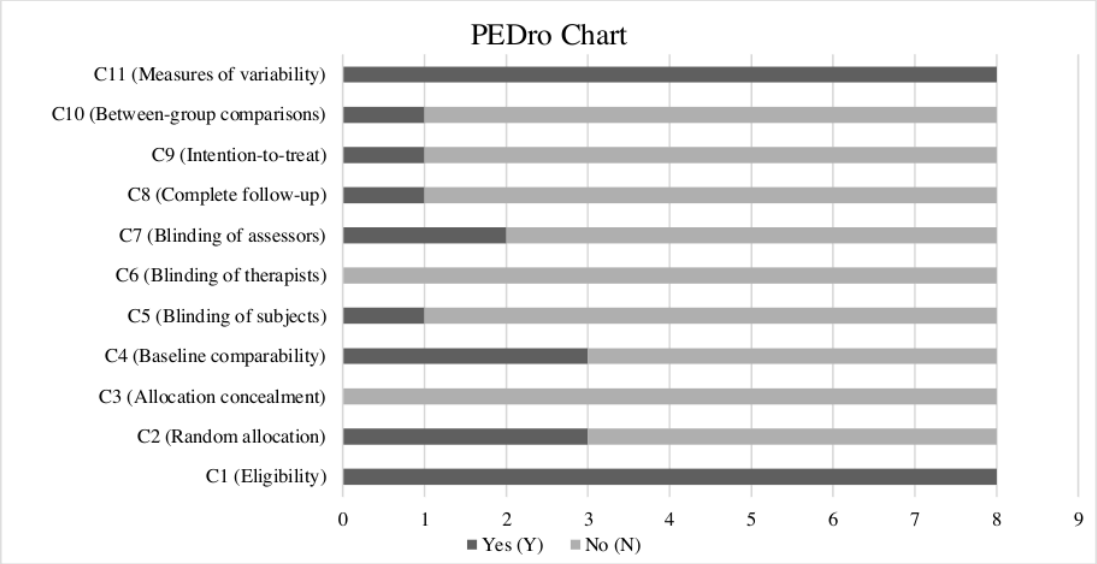


Figure 2. PEDro Criteria Distribution

Scores on the PEDro scale are arranged from 1 to 7 out of a maximum score 10 (Cochrane et al., 2023; Hanayoğlu & Can, 2023; Michalik & Zakostowicz, 2021; Raza et al., 2023; Yuste et al., 2021), indicating variability in methodological quality for the selected studies. Two studies were classified as good quality (PEDro score ≥ 6) (Annino et al., 2023; Raza et al., 2023), one study as fair quality (PEDro score 4-5) (Yuste et al., 2021), and the remaining studies were classified as poor quality (PEDro score ≤ 3) (Baştürk et al., 2015; Cekmece et al., 2024; Cochrane et al., 2023; Hanayoğlu & Can, 2023; Michalik & Zakostowicz, 2021). Common methodological limitations included the lack of randomization, absence of control groups, and insufficient blinding procedures. PEDro Score distribution of each study available in (Figure 3)

. PEDro Score of The Included Studies

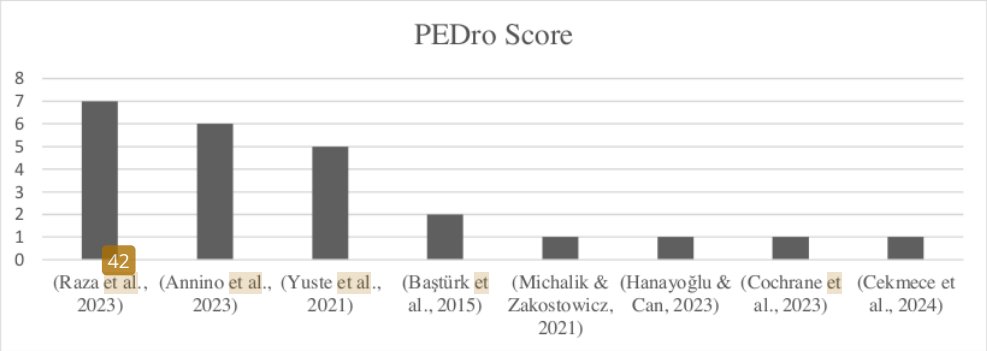


Figure 3. PEDro Score of The Included Studies

Source: Primary Data Processed from (Annino et al., 2023; Baştürk et al., 2015; Cekmece et al., 2024; Cochrane et al., 2023; Hanayoğlu & Can, 2023; Michalik & Zakostowicz, 2021; Raza et al., 2023; Yuste et al., 2021), 2026.

4. Results of individual studies

For ease of interpretation and comparisons across the results, they were arranged in a table (Table 2). The effect size of each comparison was calculated individually. The overall effect size did not apply to these studies due to the variations in outcomes with different tests.

Table 2. Results of The Included Studies

Study	Vertical Jump (Test Type)	Result	Sprint (Test Type)	Result
(Raza et al., 2023)	CMJ (Countermovement Jump)	No effect	20–30 m Sprint Test	No effect
(Annino et al., 2023)	CMJ (Vertical Jump Test)	No effect	Not assessed	N/A
(Yuste et al., 2021)	CMJ (Countermovement Jump)	No effect	20 m Sprint Test	Decreased performance
(Baştürk et al., 2015)	Vertical Jump (Sargent Jump Test)	Improvement	Not assessed	N/A
(Michalik & Zakostowicz, 2021)	Vertical Jump Test	Improvement	Speed Test (unspecified)	Improvement

(Hanayoğlu & Can, 2023)	Not assessed	N/A	30 m sprint speed test	Decreased performance
(Cochrane et al., 2023)	Vertical Jump Test	Improvement	Sprint Test (linear)	Improvement
(Cekmece et al., 2024)	Vertical Jump Test	Improvement	Not assessed	N/A

Source: Primary Data Processed from (Annino et al., 2023; Baştürk et al., 2015; Cekmece et al., 2024; Cochrane et al., 2023; Hanayoğlu & Can, 2023; Michalik & Zakostowicz, 2021; Raza et al., 2023; Yuste et al., 2021), 2026

3.4.1 Vertical jump

Vertical jump performance, commonly assessed using countermovement Jump (CMJ), was evaluated in the majority of the studies (Annino et al., 2023; Raza et al., 2023; Yuste et al., 2021). High quality consistently demonstrated a small effect in vertical jump performance with KT application (Annino et al., 2023; Raza et al., 2023; Yuste et al., 2021), low-quality studies primarily reported significant improvement (Baştürk et al., 2015; Cekmece et al., 2024; Cochrane et al., 2023; Michalik & Zakostowicz, 2021). These studies often lacked control groups and did not implement blinding procedures, which may increase the risk of bias.

Table 3. Descriptive Statistics in Vertical Jump Outcomes

Measure (Study)	**Taped Condition**			**Non-Taped Condition**			**Effect Size**	
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**d**	**Magnitude**
CMJ (Raza et al., 2023)	20	56.3	16.3	20	52.0	16.9	0.25	Small
CMJ (Annino et al., 2023)	16	76.2	1.3	16	76.4	1.3	0.05	Trivial
CMJ (Yuste et al., 2021)	33	1.92	0.12	33	1.81	0.12	0.3	Small
Sargent Jump (Baştürk et al., 2015)	18	5.84	0.37	18	5.67	0.45	0.6	Moderate
Vertical Jump (Michalik &	23	6.04	0.39	23	5.67	0.45	0.7	Moderate

Zakostowicz, 2021)								
Vertical Jump (Cochrane et al., 2023)	33	4.13	0.17	33	4.06	0.18	0.65	Moderate
Vertical Jump (Cekmece et al., 2024)	19	38.5	4.6	19	32.7	9.4	0.55	Moderate

Source: Primary Data Processed from (Annino et al., 2023; Başturk et al., 2015; Cekmece et al., 2024; Cochrane et al., 2023; Michalik & Zakostowicz, 2021; Raza et al., 2023; Yuste et al., 2021), 2026

5. Sprint

Sprint performance was assessed by a short-distance sprint test in several studies. High-quality studies consistently demonstrated no significant improvement in sprint performance following KT application, with effect sizes ranging from trivial to small, including negative effects indicating a slight decline in performance (Raza et al., 2023; Yuste et al., 2021) . In contrast, a small to moderate positive effect and a small negative effect were reported in a lower quality stu(Cochrane et al., 2023; Hanayoğlu & Can, 2023) ; however, this finding should be interpreted with caution due to methodological limitations, including the lack of appropriate control conditions. Overall, these findings suggest that KT does not provide consistent or practically meaningful improvement in Sprint performance.

Table 4. Descriptive Statistics in Sprint Outcomes

Measure (Study)	**Taped Condition**			**Non-Taped Condition**			**Effect Size**	
	N	**Mean**	**SD**	**N**	**Mean**	**SD**	**d**	**Magnitude**
20–30 m Sprint (Raza et al., 2023)	20	3.1	0.2	20	3.08	0.21	0.1	Small
20 m Sprint (Yuste et al., 2021)	33	3.25	0.18	33	3.2	0.17	-0.25	Small (negative)
Sprint Test (Cochrane	33	5.1	0.3	33	5.25	0.35	0.4	Small–Moderate

et al., 2023)								
30 Sprint speed Test (Hanayoğlu & Can, 2023)	32	4.43	0.32	32	4.48	0.32	-0.33	Small (negative)

Source: Primary Data Processed from (Cochrane et al., 2023; Hanayoğlu & Can, 2023; Raza et al., 2023; Yuste et al., 2021), 2026

Discussion

The present systematic review seeks to provide an evidence-based and critical clarification of the impact of kinesiology taping (KT) on the improvement of athletic performance, particularly sprint and vertical jumps. An important new contribution of this study is the direct integration of methodological quality in the interpretation of findings, which indicates an inverse relationship between study rigor and effectiveness reported. However, high-fidelity studies showed little to no effects of KT, while lower-quality studies had relatively moderate effects but still demonstrated improvements. Because this finding is very suggestive, it indicates that previous reported benefits from KT could be due to bias, placebo effects, or less than ideal study design, instead of actual physiological enhancement. From a practical standpoint, these results have critical implications for clinicians, coaches, and athletes in that KT should not be deemed a reliable intervention to improve explosive production in trained athletes.

1. Methodological Quality and Risk of Bias

   Attention should be given to the potential influence of study design characteristics on the reported outcomes. In several studies employing within-subject or repeated measures designs, the absence of an adequate washout period may have introduced a carryover effect, particularly when testing conditions were conducted within a short time period. Eligibility criteria (C1) were clearly reported across all included studies, indicating appropriate documentation of participant selection, the generalizability of the findings may still be limited, as most studies included relatively homogeneous athletic populations.

   Strengths and limitations of the studies included: several studies had a strong baseline (C4), within-subjects designs in particular had a strong baseline. In addition, in several studies test conditions were randomized (C2), between groups comparisons were reported in the majority of studies (C10) reported including P-values and mean differences where appropriate. Finally, in several studies the number of participants was maintained throughout the study (C8), thus reducing the risk of attrition bias.

   Several limitations need to be addressed. Firstly, information on allocation concealment (C3) was not reported in most cases. Furthermore, studies mostly did not report on blinding of participants (C5) and assessors (C7). Since interventions on KT are mostly tested within the interventions themselves, participants are likely aware of the interventions. Therefore, their as well as the assessors' expectations might influence results. Blinding the therapist (C6) is hardly possible for most interventions. In addition, several studies did not report on sufficient statistical details (C11), i.e., on effect size and on measures of variability. Overall, several limitations need to be addressed since

they might result in a moderate to high risk of bias. It cannot be excluded that lower quality studies reported more positive results.

2. Effects on Vertical Jump Performance

The evidence for Kinetic Training (KT) and vertical jump in athletic populations shows that there is sufficient evidence to conclude that KT has little to no effect for jump performance. There is a large amount of high quality research in this area which has found after KT implementation there is a trivial to small positive change in jump performance (Annino et al., 2023; Raza et al., 2023; Yuste et al., 2021). In contrast to results of studies of lower methodological quality (Methodological Limitations) which for the most part lack important control elements (e.g. blinding of experimenters and athletes) and, therefore, are influenced by various biases (placebo effect, experimental bias), the results of such studies are not supported by actual improvements in physical function (Raglin et al., 2020).

Vertical jump performance is dependent upon an athlete's ability to express high levels of power, via the stretch-shortening cycle (SSC). The SSC requires high levels of rapid neuromuscular activation and the ability to produce high-velocity forces. As athletes become more experienced at training, their neuromuscular systems become highly optimized and 'ceiling' for improvement is reached. Whilst programs such as KT may be able to provide additional sensory input to athletes, the marginal amount of 'input' that they are able to provide is not sufficient to allow for increased high magnitude force production in highly trained athletes. (Raglin et al., 2020).

While KT may offer tactile feedback to users of the tapes, the amount of neuromuscular facilitation offered by KT is not sufficient to overcome normal human limitations of performance. Thus, studies using highly powerful athletes for the trials of very high intensity and powerful activities will find no ergogenic effect of KT with any effect greater than zero to be of value to the athlete in sport.

3. Effects on Sprint Performance

There are mixed results on the use of Kinesio Taping (KT) for sprint performance, with high quality studies finding trivial to small positive and negative effects on power-based tasks. The critical finding here is that of study quality (Raza et al., 2023; Yuste et al., 2021). While lower-quality studies have reported small-to-moderate positive effects (Cochrane et al., 2023; Hanayoğlu & Can, 2023). In conclusion, findings from studies of lower quality that reported positive effects are confounded by several methodological limitations including the inability to blind participants to the application of KT and an insufficient number of control conditions to determine specific effects of KT. Therefore, any positive findings for sprint performance are likely to be due to psychological expectancy or placebo effects rather than any true physiological effects of KT (Raglin et al., 2020).

The main contribution of this review is to test the application of KT strategies within complex motor tasks. The review uses the example of sprinting as a highly complex movement requiring high levels of neuromuscular coordination, rapid rate of force production and multi-joint energy transfer. It appears that cutaneous input from KT has little to no effect on such highly innate physiological processes (Raglin et al., 2020) This review also sought to assess the potential of negative effect of KT on performance. While the effect sizes for the cohorts of athletes included in this review were generally small and often positive, there was some evidence to suggest that in highly trained athletes performing complex motor actions, optimal movement patterns could be compromised by the additional sensory information from KT. Such

information could act as 'sensory noise' or the taping could even act as a mechanical constraint to movement.

4. Influence of Methodological Quality on Outcomes

   There was some evidence in the studies reviewed for this article on the relationship between study quality and findings. The higher quality studies (those with higher scores for study quality) found very small to no effect for KT on sprint performance. The lower quality studies (those with lower scores for study quality) found moderate to large positive effects of KT on sprint performance. Thus, future research into the effects of KT should be conducted with appropriate methodology in order to draw reliable conclusions.

   Because the included studies did not contain blinding and a proper control group, the results might have been overestimated. The KT tape might have had a placebo effect on the athletes. So the results found in this review might not be the result of real performance enhancement. More studies of high methodological quality are needed to draw conclusion about the use of KT as a performance-enhancing intervention.

5. Limitations

   Limitations of the findings of this review relate to diversity in the methods of testing, measures of performance, and taping. As a result, the findings of studies that have investigated the effects of KT are not always comparable. In addition, with the exception of a small number of high quality studies, the majority of studies that have investigated the effects of KT have focused on the short-term effects of the intervention..

Conclusions

The effect of kinesiology taping (KT) on athletic sprint and vertical jumping performance in athletes is evaluated in this review. Available evidence is in agreement, KT does not produce significant benefits in performance. This review suggests a strong association between the reported findings and the methodological quality, with poor-quality studies reporting beneficial effects and high-quality studies regularly describing little or no benefit (and in some cases even small negative effects). This suggests that perceptions of performance enhancements due to KT seem more complicated, driven by potential bias, placebo responses, or limitations of study design rather than the underlying physiological mechanism. KT should not be seen as a strategy that will ultimately improve the explosive performance of trained athletes; KT must be considered as a less reliable strategy. Overall, the drawbacks in assessing results in future controlled studies must be noted with reference to a well-defined randomized controlled trial design with blinding protocols and a standardized taping protocol. In addition, further research is required for examination of the long-term effects of KT, along with investigation of the mechanistic basis, mainly regarding neuromuscular control and motor performance. It needed to continue the development of new and a wider range of evidence and better information, which can guide decision-making, in the realm of sport physiotherapy practice

Acknowledgment

The authors would like to express their sincere gratitude to Hermina Health Institute and Universitas Indonesia for their academic support and contribution to this study.

No specific funding was received for this study.

Conflict of interest

The author declares that they have no conflict of interest

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Cite this article as:

Hayuningrum, C.F., & Putra, K.A. (2026). Does Kinesiology Taping Enhance Athletic Performance? A Systematic Review of Sprint and Vertical Jump Outcomes. *Indonesian Journal of Physical Education and Sport Science (IJPESS)*, *X*(X), X-XX.

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