Table 5. Summary of literature that has investigated the effects of MC phase on vertical jumping and / or isometric force-time characteristics

Key: CMJ: Countermovement Jump; SJ: Squat Jump; DJ: Drop Jump; IMTP: Isometric Mid-Thigh Pull; JH: Jump Height; RSI: Reactive Strength Index; PP: Peak Power; PF: Peak Force; RFD: Rate of Force Development; FT: Flight Time; CT: Contraction Time; FT:CT: Flight time to contraction time ratio; COM: Centre of Mass; TO: Take-off; ms: Milliseconds; Hz: Hertz; MC: Menstrual Cycle; EF: Early Follicular; LF: Late Follicular; ML: Mid-Luteal; Phase 1 / Phase 4: Specific hormonal phases used for analysis; F: Familiarisation; R: Reliability; p: P-value; d: Cohen's d (effect size); g: Hedges' g (effect size); ES: Effect Size; SR: Systematic Review (calculation).

Author	Isometric / Jump task and methods	Force Platform / Sensor Technology	Force-time measures	Reliability (R) / Familiarisation (F) reported	Results
Cabre et al.[9]	Vertical DJ – 3 trials	Bertec, 1200 Hz, 10 Hz Butterworth filer	JH, RSI	No, F or R	• Reactive Strength: Small increase in RSI during the follicular phase compared to the luteal phase (g = 0.32, 13.2%) • Vertical JH: Small increase in JH during the follicular phase compared to the luteal phase (g= 0.35, 7.2%)
Carmichael et al.[10]	Vertical CMJ – 1 trial	Kistler (no other details provided)	FT: CT, PP	No, F or R	• JH & Power: No significant differences (p > 0.05) in JH, PP, or relative PP between phases • CMJ Kinematics: A non-significant, moderate increase in the FT:CT ratio was observed during the follicular phase compared to the luteal phase (g = 0.66, 9.4%) • Power Output: PP and relative PP showed only trivial differences between the follicular and luteal phases (g = 0.16)
Osborne et al.[34]	Vertical CMJ - 3 trials Multiple rebound jump - 3 trials	MuscleLab	JH	Yes, F and R	• CMJ Height: Systematic review (SR) calculation revealed a small reduction in maximum and mean CMJ height during the EF phase compared to the post-ovulatory and ML phases (g = 0.25–0.39; 3.8–7.6%). • Repeated Jump Performance: Small reductions were also observed in maximum and mean repeated CMJ height during the EF phase versus the post-ovulatory and ML phases (g = 0.24–0.44; 2.9–7.2%).
Peltonen et al.[38]	Isometric leg press – min 3 trials	Force sensor (University of Jyväskylä), 2000 Hz, 20 Hz low pass filter	RFD, PF, average force 100ms	Yes, F and R	• No significant differences in force measures (p > 0.05) – descriptives not provided
Smith et al.[42]	Vertical CMJ - 3 trials, SJ - 3 trials, IMTP 2 trials	Kistler, 1000 Hz	JH, velocity at TO, PP, RFD, PF, impulse, COM displacement, phase duration, mean velocity	Yes, F and R	• No significant differences in CMJ height, SJ height, between Phase 1 (EF) and Phase 4 (ML) (p > 0.05). • Relative mean concentric power was 16.8% greater in Phase 4 (p = 0.021, g = 1.03). FT:CT ratio was also moderately higher in Phase 4 (g = 0.67), despite non-significant moderate increases in contraction time (g = 0.77) and concentric time (g = 0.73) during Phase 1 • Phase 4 demonstrated a moderate increase in SJ mean velocity (g = 0.80). However, Phase 1 exhibited significantly greater impulse at 50 ms (4.7%; p = 0.031, g = 0.33), a higher FT:CT ratio (g = 0.73), and moderate increases in RFD at 50 ms (g = 0.80) and 100 ms (g = 0.75) • Relative IMTP PF showed a moderate increase in Phase 4 (7.85%; g = 0.72). Phase 1 displayed small increases in impulse across the 50–250 ms range (g = 0.32–0.56)
Thompson et al.[49]	Vertical 5 repeated CMJ, 10 × Bilateral Hops	Quattro jump, Kistler	Contact time, FT, average power, FT: CT	Yes, F / No R	• Bilateral Hop Performance: Significant main effect for flight time (p = 0.007), which was significantly lower in the LF phase compared to the ML phase (p = 0.002, d = 0.72, -9%). No significant differences were observed for average power (p = 0.079) or contact time (p = 0.791) • CMJ Flight Time: Significant main effect for flight time (p = 0.034), with significantly lower values recorded in the LF phase compared to the ML phase (p = 0.003, d = 0.40, -3.3%) • CMJ Power: No significant differences in average power were identified across the phases (p = 0.518)