The documentation is incorrectly using _ instead of - for several keyword modifiers in the cpu-affinity area of the Suricata.yaml documentation:

"set_cpu_affinity: no"

Also:

"cpu_affinity:
  - management_cpu_set:
    cpu: [ 0 ]   #Set the CPU you want to process this set/thread.
  - receive_cpu_set:
    cpu: [ 0 ]
  - decode_cpu_set:
    cpu: [ 0, 1 ]
  mode: "balanced"       #Can be set at 'balanced' and 'exclusive'.
  - stream_cpu_set:
    cpu: [ "0-1" ]
  - detect_cpu_set:
    cpu: [ "all" ]
  mode: "exclusive"
  prio:
    low: [ 0 ]
    medium: [ "1-2" ]
    high: [ 3 ]
  default: "medium"
  - verdict_cpu_set:
    cpu: [ 0 ]
  prio:
    default: "high"
  - reject_cpu_set:
    cpu: [ 0 ]
  prio:
    default: "low"
  - output_cpu_set:
    cpu: [ "all" ]
  prio:
  *

My version of suricata is 2.0 RELEASE, according to this, these are invalid keywords and should be replaced with s/_/-/g.