main effect on y1 —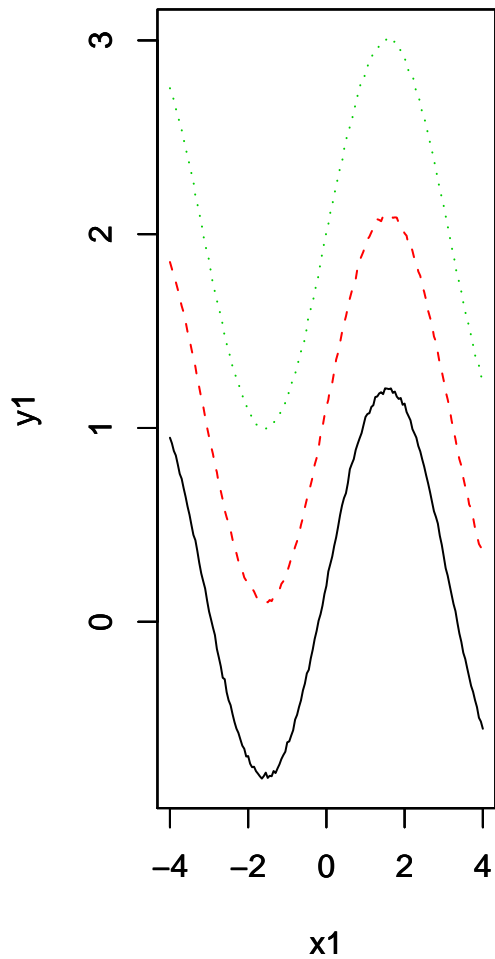 main effect on y2