LETTERS

JOB STRAIN AND HEALTH-RELATED LIFESTYLE

Because of several significant methodological and interpretational errors in Heikkilä et al.¹ pertaining to job strain and health-related lifestyle, we disagree with the authors that

reducing work-related psychosocial stress \dots is unlikely to be an important target for any policy or intervention aiming to influence health-related lifestyle factors or overall lifestyle. $^{1(p2095)}$

First, this contradicts the literature review in the introduction, in which the authors state that "psychosocial stress at work has been shown to be associated with individual unhealthy lifestyle factors," 1(p2090) as well as the authors' conclusion in another article, in which the authors write that "interventions to increase physical activity in the population may benefit from taking workplace factors into account." 2(p1087) Second, although they found a significant association between job strain and unhealthy lifestyle in their cross-sectional analysis with 11 studies, there was no significant association in their longitudinal analysis with four studies. There were different definitions of "unhealthy lifestyle" in their longitudinal analysis ("having 1-4 unhealthy lifestyle factors" in the online supplemental table) and in their cross-sectional

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analysis ("having all 4 unhealthy lifestyle factors" in Table 2).1 Because of a large variation among those who have "1-4 unhealthy lifestyle factors" (e.g., 32% had one unhealthy lifestyle factor and 3% had all four unhealthy lifestyle factors in cross-sectional studies), we believe that the authors should have reported the longitudinal association between job strain and unhealthy lifestyle defined as "having all 4 unhealthy lifestyle factors" as in the crosssectional analysis. Third, the authors should have discussed two probable biases in their longitudinal analysis, a differential exposure misclassification, 3,4 and a differential attrition rate by job strain status.⁵ The authors used only a one-time (baseline) measure of job strain in their longitudinal analysis. Furthermore, their other article⁴ that uses the same four cohort studies indicates significant exposure misclassification—58% of the people in the job-strain group at baseline changed to the nonjob-strain group at follow-up, and 11% of the people in the nonjob-strain group at baseline changed to the job-strain group at follow-up.

In addition, Clays et al. ⁵ reported that considerably more people in the job-strain group (at baseline) than in the nonjob-strain group dropped out during the follow-up period in the Belstress study, one of the four cohort studies. These errors indicate an underestimation of the association between job strain and unhealthy lifestyle in Heikkilä et al. ¹ Lastly, this article contained other errors such as obesity being described as a "lifestyle" factor ^{6,7} and an underrepresentation of workers with job strain in their individual studies. ⁸⁻¹⁰

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All authors contributed substantially to the conceptualization and design of the letter and the interpretation of data.

B. Choi drafted the letter, and S. Ko, P. Landsbergis,
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