

Pandemic Programming

HOW COVID-19 AFFECTS SOFTWARE DEVELOPERS AND HOW THEIR ORGANIZATIONS CAN HELP

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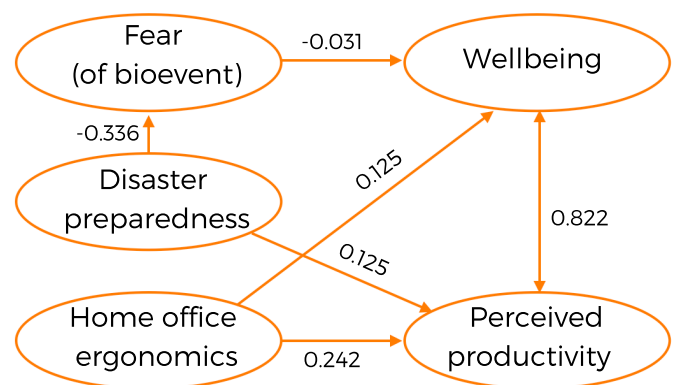
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BACKGROUND AND METHOD

- Little is known about working from home during major crises
- A questionnaire was designed to explore the effect of COVID-19 lockdowns on developers
- Over 2000 people from more than 50 countries completed the questionnaire
- Participants assessed their wellbeing and productivity before and while working from home
- Data was analyzed using structural equation modeling

EFFECTS ON WELLBEING AND PRODUCTIVITY

- Developers' wellbeing and productivity are suffering
- Productivity and wellbeing are closely related
- Better home office ergonomics help wellbeing and productivity
- Women, parents, and people with disabilities may be disproportionately affected
- Different people need significantly different kinds of support



RECOMMENDATIONS FOR SOFTWARE COMPANIES

- DO support developers' emotional wellbeing; it will help their productivity
- DO ask employees what they need (e.g., equipment, professional training)
- DO help employees improve the ergonomics of their home work spaces
- DON'T expect normal productivity during the pandemic; it's unrealistic
- DON'T pressure employees to be productive; it will make matters worse
- DON'T make any decisions (e.g., layoffs, promotions) based on productivity during the pandemic

12

LANGUAGES

Arabic, Chinese, English, French, Italian, Japanese, Korean, Persian, Portuguese, Spanish, Russian, Turkish

53

COUNTRIES

With region-specific advertising strategies

2225

DEVELOPERS

81% male
94% employed full-time
27% live with children
8% have disability
9.3 yrs mean experience

~3

WEEKS

Data collection from March 27, 2020, to April 14, 2020