## Reply to 'A cross-cultural approach to the future of work'

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De Cremer and Narayanan provided an insightful commentary (A cross-cultural approach to the future of work. *Nat. Rev. Psychol.* https://doi.org/XXXX (2022))<sup>1</sup> on our article on self-determination theory and the future of work (Gagné, M., Parker, S.K., Griffin, M.A. et al. Understanding and shaping the future of work with self-determination theory. *Nat Rev Psychol.* 1, 378–392 (2022)).<sup>2</sup> We agree with De Cremer and Narayanan that technologies need to be designed in alignment with the cultural values of those who will be using them. However, we want to correct the misconception that self-determination theory is western-centric. In fact, cross-cultural research generally supports the proposition that the needs for competence, autonomy and relatedness are basic (lead to a decrement in optimal functioning if unsatisfied) and universal (of importance across the lifespan, gender, and cultures).<sup>3</sup>

Cultures vary in their values and goals. Thus, according to self-determination theory the needs can be satisfied differentially across cultures. For example, in individualistic cultures, feelings of volition and intrinsic motivation tend to be related to making choices independently, whereas in collectivistic cultures they tend to be related to accepting (internalizing) choices made by trusted in-group members. Trust in the wider collective society in some collectivistic cultures might partly explain why monitoring is experienced by these employees as autonomy-supporting. De Cremer and Narayanan also suggest that humans can relate to machines in some cultures. It might be that, in these cultures, relatedness needs can be met through developing 'relationships' with machines. We did not address this anthropomorphistic issue in our article, and hope future research can explore this intriguing phenomenon. Altogether, we suggest it is not needs per se that vary across cultures, but how these needs might be met.

De Cremer and Narayanan also note that people have habituated to surveillance in countries where it has become ubiquitous. However, accepting being monitored does not

imply giving up one's autonomy, as suggested by De Cremer and Narayanan. Their perspective stems from a misunderstanding of the definition of autonomy in self-determination theory: It is defined as feeling volitional, not feeling independent. These are two orthogonal constructs: People can autonomously (volitionally) depend on someone else (relinquish our control to others), such as a government or a physician who makes treatment decisions for them.<sup>7,8</sup> People can also become non-volitionally independent, such as adolescents who resist their parents' persuasion attempts to engage in healthier behaviors.<sup>9</sup>

Research has shown that supporting people's autonomy, for example by providing a sound rationale for decisions and participative decision-making, helps them internalize the value of activities, culture, and decisions. <sup>10</sup> The same principles likely apply to the endorsement of monitoring: in certain situations, such as when people understand and accept the rationale, monitoring can be experienced as autonomy-supporting. This point dovetails with the argument in our article that using monitoring for evaluative versus developmental purposes has consequences for its acceptance, and that giving users control over when and what is monitored helps improve their attitudes and usage of the monitoring technology.

When monitoring helps enhance work design, it can improve worker outcomes. <sup>11</sup> For example, monitoring can be used to provide feedback on performance; this feedback can make one's work more complex (and therefore stimulating) if employees are asked to use the information provided by the monitoring to make daily decisions (provided they have the decision-making power to do so, that is, autonomy). Monitoring can also provide more role clarity and knowledge of the impact employees have on stakeholders, provided that there is transparency about what is being monitored, and that data created through monitoring are perceived as relevant and accurate. <sup>11</sup> Thus, we suggest that there are circumstances under which monitoring might support autonomy needs.

Understanding culture-specific need-supportive behaviors is crucial to technology design and use. However, values can also vary within culture. The extent to which people within a cultural group internalize their own cultural values has implications for their optimal functioning. <sup>12</sup> It is therefore important not to assume in-group homogeneity in values when designing or using technologies.

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Competing interests

The authors declare no competing interests.

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