

Enhancing Driver Attention Through Behavior Change:

Insights from the Norwegian National Driving Challenge



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Background and Aim

Driver distraction remains a major road-safety challenge despite widespread awareness of its risks. The Norwegian Public Roads Administration launched the national driver-distraction campaign "Thank You for Your Attention" in 2018 and relaunched it in 2023. A national baseline survey of 3,025 drivers identified an intention–behavior gap (Opinion, 2023). Most drivers intend to drive attentively but struggle to translate that intention into behavior.

The National Driving Challenge was developed as the campaign’s action-oriented component to help drivers translate intentions into action. The study examined reported behavior change and factors associated with successful change.

Theoretical Framework

The intervention was informed by the Health Action Process Approach (HAPA) (Schwarzer, 2008), implementation-intention research (Gollwitzer, 1999) and self-regulation theory. It focused on motivational factors (intention, self-efficacy and perceived control) and volitional factors (planning, goal awareness, effort and self-monitoring) involved in translating intention into action.

The Intervention

The National Driving Challenge was a voluntary, eight-week intervention (Bergh & Riege, 2025). Participants were instructed to select one distracting behavior to discontinue from a predefined list, formulate an implementation intention specifying what, when and how to change, and share their plan with another person. They logged daily whether they had driven and, if so, whether they had refrained from the selected behavior (yes/no). Each Monday, participants received a motivational text message; some were tailored to the selected behavior and provided practical strategies for reducing distraction.

Study Design and Analysis

The intervention was first tested in a controlled pilot (N = 230; intervention and control groups) and refined before national rollout. The national evaluation used a voluntary, single-arm pre–post design in a self-selected sample, without random allocation or a concurrent control group. Pre–post surveys assessed self-reported driver attention, perceived inattention among other drivers, attitudes and HAPA-related constructs. Regression analyses examined factors associated with reported success. Attrition analyses showed only minor differences between completers and non-completers.

The evaluation was observational and based on self-report; causality cannot be established.

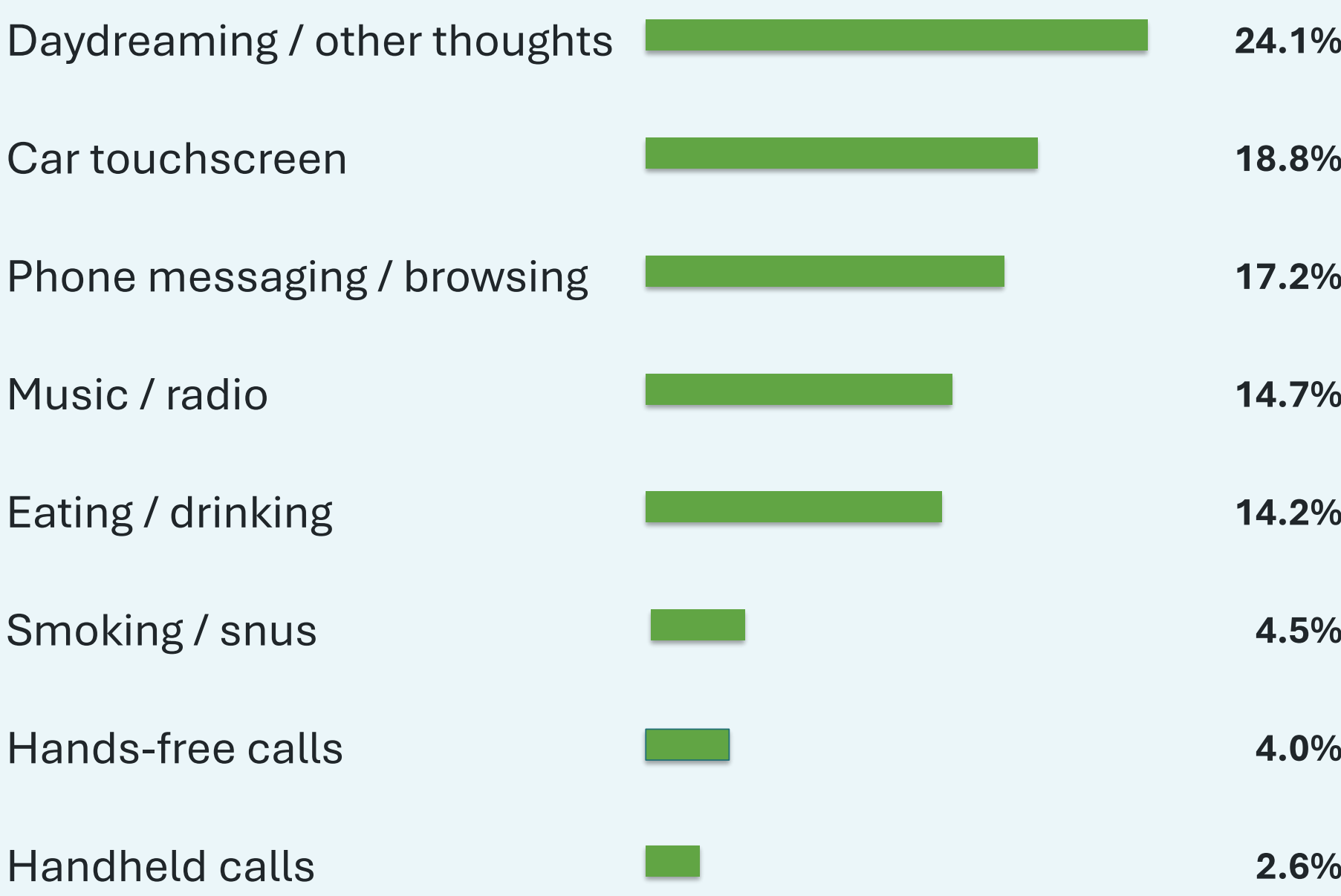
Participants



Participants drove daily or several times a week. The analytic sample comprised participants who completed both surveys and all eight weeks of daily reporting. The analytic sample was nationwide and predominantly male (67.6%), with a median age group of 50–59 years.

Selected Distracting Behaviors

Distribution of selected target behaviors in the analytic sample (N = 896). Each participant selected one behavior from a predefined list.



Reported Behavior Change



Successful change was defined as a self-rated score of 7–10 on a 10-point scale for refraining from the selected behavior.

Possible spillover effect

Overall, **70%** reported changing at least one additional behavior: 40.6% reported one additional change, **16.3%** two, and 13.1% three or more.

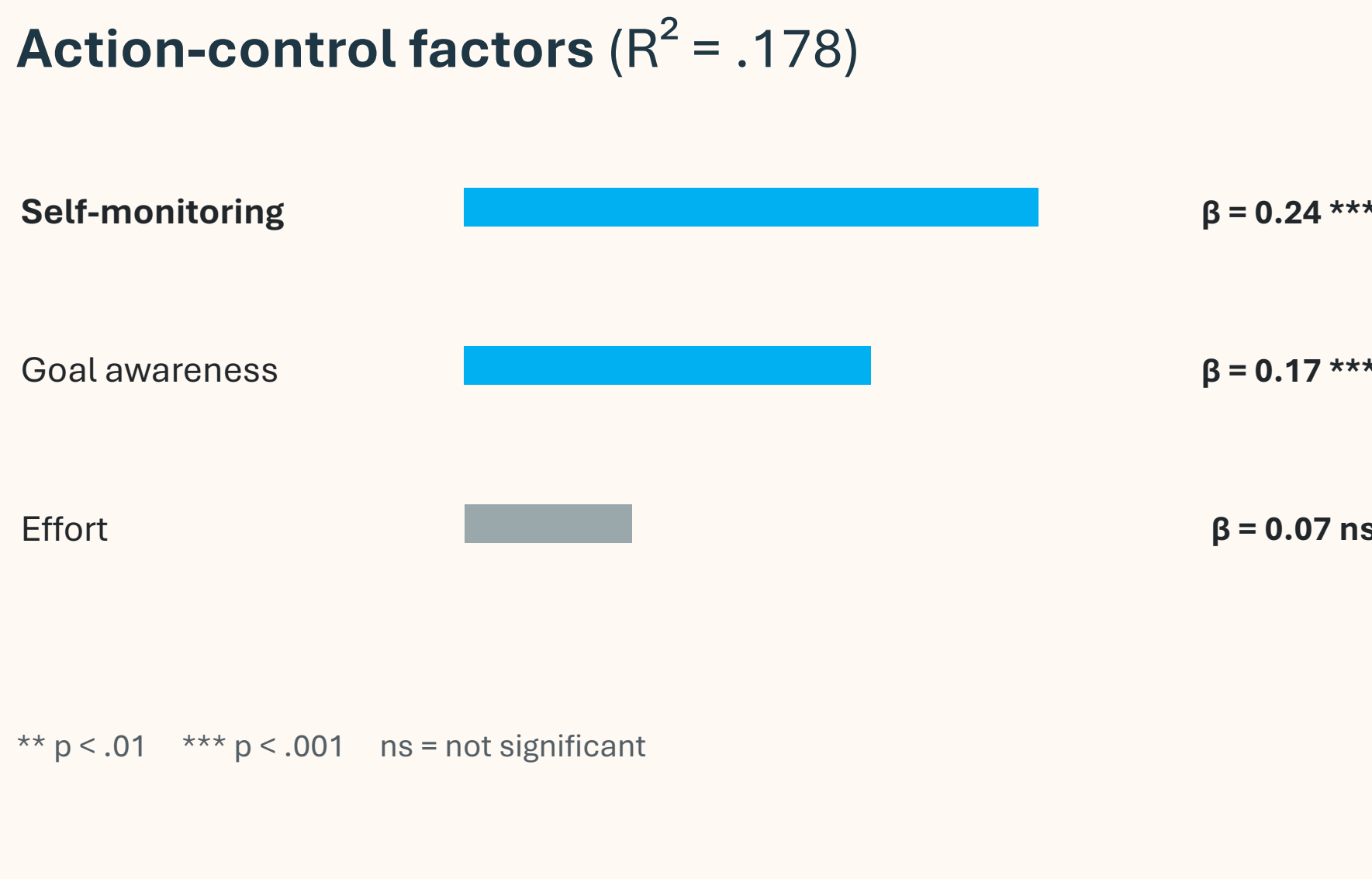
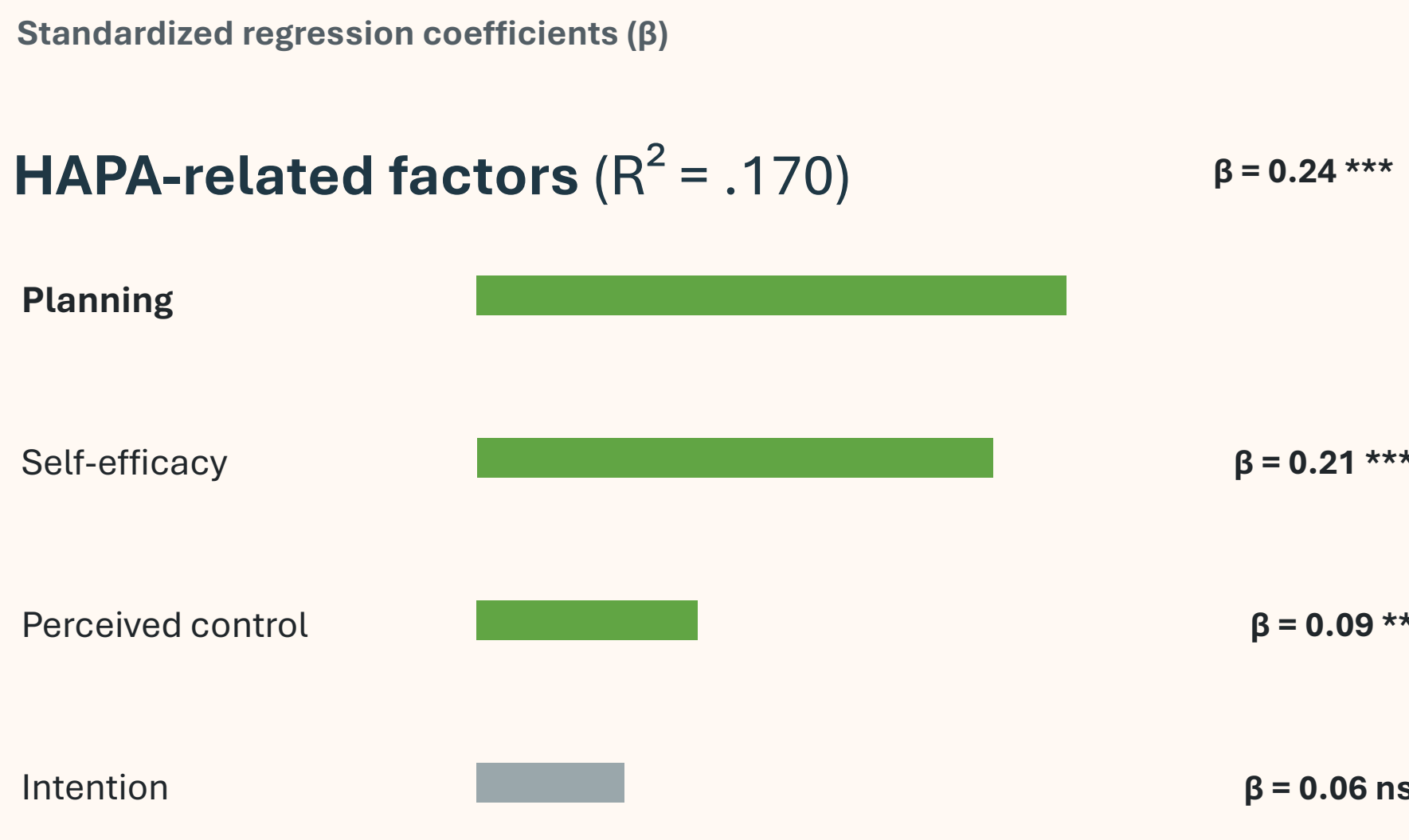
These reports suggest possible positive spillover beyond the selected behavior (Dolan & Galizzi, 2015). However, the observational design and reliance on self-report do not establish whether the intervention caused these additional changes.

Success across behaviors

Self-rated success was highest for handheld phone conversations (9.0/10) and lowest for daydreaming (7.8/10). Daydreaming involves internal, cognitive distraction that may be harder to notice and interrupt than a concrete action such as using a phone.

Factors Associated with Success

Planning and self-efficacy showed the strongest associations in the HAPA-related model, whereas self-monitoring showed the strongest association in the action-control model. Goal awareness and perceived control were also significantly associated with reported success, whereas intention and effort were not.



The results showed no statistically significant association between intention and reported success. Planning, self-efficacy, perceived control, goal awareness and self-monitoring were significantly associated with success. These findings are consistent with a role for volitional processes in bridging the intention–behavior gap, but do not establish causality.

Age and Gender

There was a modest positive correlation (r = .211, p < .001) between behavioral change and age. This suggests that older participants reported more change in behavior than younger ones. There was no relationship between behavioral change and gender.

Findings and Implications

Attention and Attitudes

Self-perceived inattention **Small decrease (Cohen’s d = 0.17)**

Self-reported inattention decreased slightly from before to after the intervention (mean 2.57 before, 2.46 after; d = 0.17). Already favorable baseline ratings may help explain the small reduction. Self-reports may also be less sensitive to habitual or momentary lapses.

Self–other discrepancy **Large gap, small increase over time**

Participants consistently rated other drivers as more inattentive than themselves. The self–other difference was large (ηp² = .62), whereas the increase in the gap over time was small (ηp² = .05). The pattern may reflect self-assessment bias (Kruger & Dunning, 1999), as drivers could notice others’ visible errors more readily than their own routine distraction.

Attitudes toward attentive driving **Stable, positive attitudes**

Attitudes remained stable. Limited change was expected because attitudes were already positive. Reported behavioral improvement without attitudinal change suggests that strengthening safety attitudes alone may be insufficient.

Discussion

Reported success was associated with planning, self-efficacy and self-monitoring, whereas intention was not a significant predictor. The findings suggest that concrete volitional support may be more important for behavior change than attempts to influence intentions alone. Participants reported substantial behavior change despite largely unchanged attitudes, indicating that targeting specific behaviors may complement attitude-based approaches. Evidence of changes beyond the targeted behavior also suggests potential positive spillover effects.

However, the findings should be interpreted with caution. The study relied on self-reported data, was subject to self-selection and attrition, lacked a control group, and cannot establish causality or long-term effects. Objective measures and longer follow-up are needed.

Overall, the findings indicate the value of pairing awareness communication with concrete volitional support.

Conclusion

A structured approach and practical tools may help drivers turn intentions into action. Most participants reported successful behavior change, including spillover effects to other distracting behaviors.

The National Driving Challenge shows how a national road-safety campaign can be complemented by a theory-based intervention that provides concrete measures to support behavior change and help close the intention–behavior gap.

Key References

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