



# Working with a Preferred EMS Partner Reduces Stress and Increases Perceived Social Support in Paramedics



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## Introduction

- ❖ A job in emergency medical services (EMS) is associated with high occupational stress.
  - Specifically, patient care stress can affect overall daily stress of EMTs (Boudreaux, Jones, Mandry, & Brantley, 1996).
  - High occupational stress has been associated with high global psychological distress (Boudreaux, Mandry, & Brantley, 1997).
  - High levels of stress can decrease a health care provider's confidence in performing a task (Williams, Dale, Glucksman, & Wellesley, 1997), increase negative attitudes towards patients (Cydulka, Lyons, Moy, Shay, Hammer, & Mathews, 1989), and increase critical errors (LeBlanc, Mac Donald, McArthur, King, & Lepine, 2005).
- ❖ Social support has been shown to buffer stress (Wills, 1990).
  - Cohesiveness and support among EMTs and positive supervisor interactions result in lower work related stress scores (Revicki & Gershon, 1996).

## Objective

- ❖ EMS often question whether 2- or 1- paramedic staffed ambulances are better; however, one neglected issue is who paramedics prefer to work with (paramedic or EMT-B partner).
- ❖ The current study sought to determine if paramedics prefer to work with a paramedic or an EMT-Basic partner.
- ❖ In addition, we investigated whether paramedics' partner preference is related to social support and to perceived general stress.
- ❖ We predicted that paramedics working with their preferred EMS partner experience increased social support, which buffers effects of stress, and consequently would improve performance.

## Method

### Participants and Procedure

- ❖ One hundred six paramedics (38 women, 68 men;  $M$  age= 35 years,  $SD$ = 8.37,  $Range$ = 21-58 )
  - Years of experience in EMS:  $M$ = 11.19,  $SD$ = 6.64,  $Range$ = 2-35 years
  - Years of experience as a paramedic:  $M$ = 7.58,  $SD$ = 5.63,  $Range$ = .25-24 years
  - Length of time in current service:  $M$ = 6.52,  $SD$ = 5.65,  $Range$ = .17-25 years
- ❖ Questionnaires were personally distributed to paramedics at the Texas EMS conference and to on-duty paramedics working at various services in the greater Houston area.
- ❖ An incentive of \$5 and a raffle ticket for an iPod were offered.

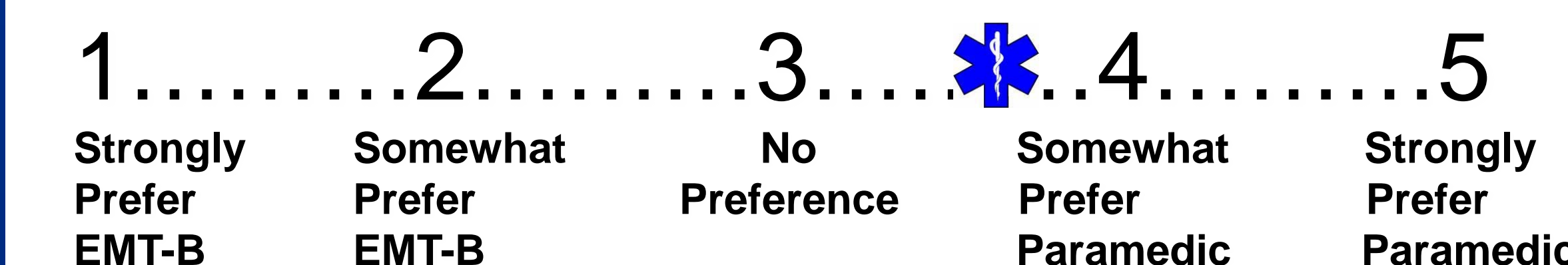
### Questionnaire

- ❖ 5-point Likert scales
- ❖ **Preference for a Paramedic vs an EMT-B partner** (1= *Strongly Prefer EMT-B*, 3= *No preference*, 5= *Strongly Prefer Paramedic*)
  - 6 questions asked participants to rate who they would prefer in each of the following scenarios:
    - To feel more confident, to work more efficiently, decrease time on scene, to decrease time to intervention, on an ALS call, & on a BLS call
    - Potential reasons for partner preferences (8 questions)
- ❖ **Perceived general stress** during the last month (26 items adapted from Williams, Dale, Glucksman, & Wellesley, 1997;  $\alpha$ = .89)
- ❖ **Perceived social support** (14 items adapted from Bartram, Joiner, & Stanton, 2004;  $\alpha$ = .85)
- ❖ **Background, Work Environment, & Experience**
  - Age, gender, years of experience, % of time spent working with paramedic and EMT-Basic partners
- ❖ Open-ended partner preference question asking the participant to describe in more detail their preference or indifference for a paramedic partner versus an EMT-B partner.

## Results

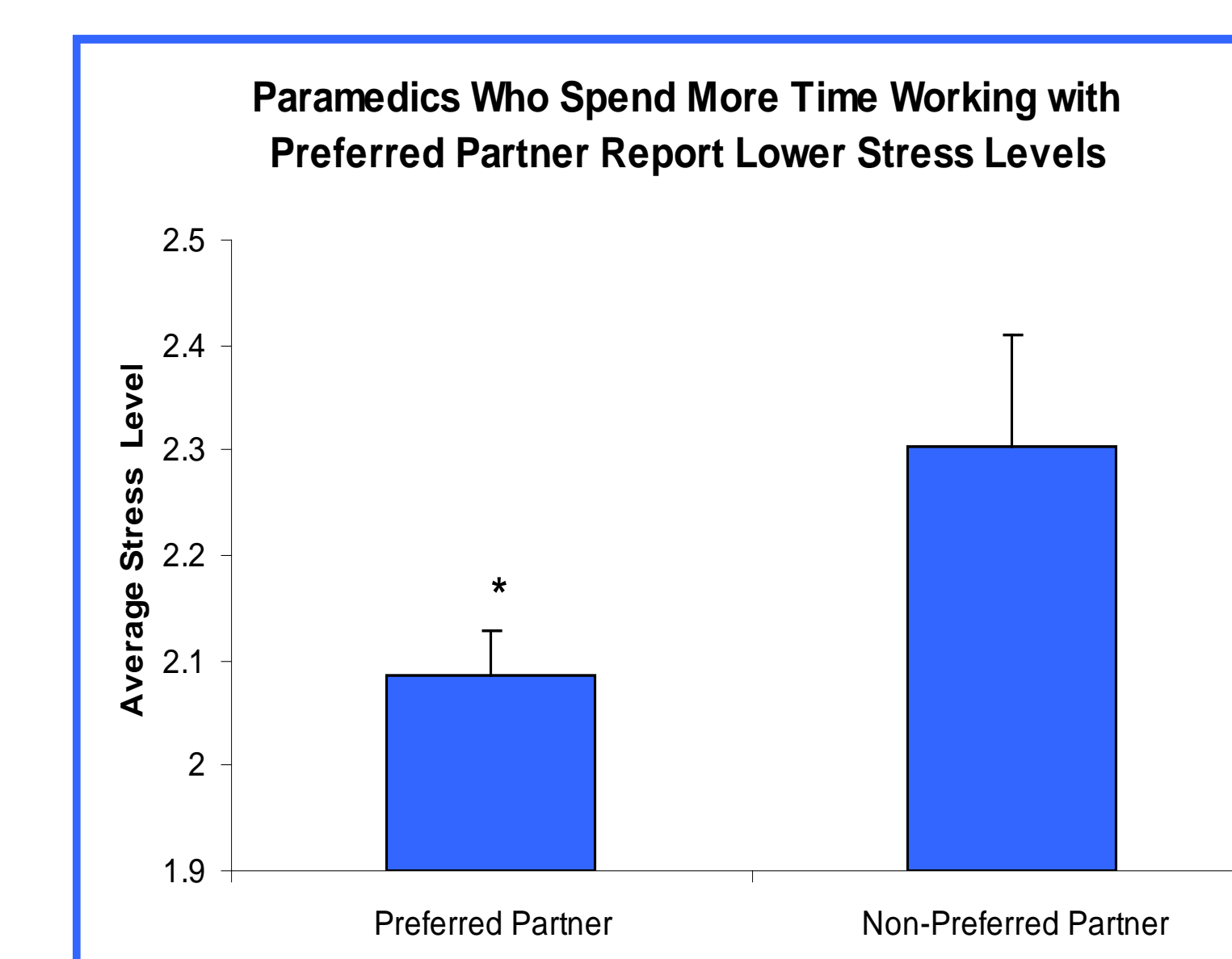
Four significant findings emerged.

- 1) Participants expressed an overall preference for working with a paramedic than with an EMT-Basic partner ( $M$ = 3.69 vs 3.0/No preference),  $t(105)$ = 13.36,  $p$  < .0001.

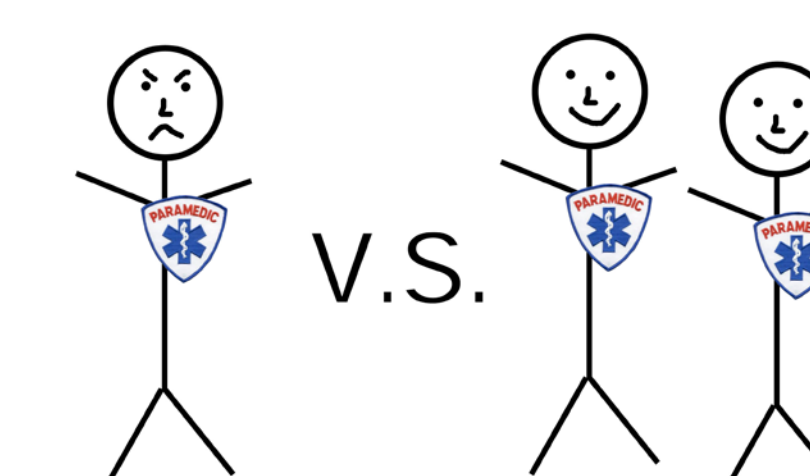


- 2) Preference for a paramedic partner was positively related to participants' agreement that a paramedic allows for simultaneously administration of ALS care,  $r(106)$ = .29,  $p$  < .005, and that a paramedic partner can make vital observations that participants might have missed,  $r(106)$ = .25,  $p$  < .011.

- 3) As predicted, paramedics who worked a greater percentage of time with the skill level partner they preferred reported lower stress levels ( $M$ = 2.09) than those who spent more time with their non-preferred partners ( $M$ = 2.30),  $t(86)$ = 2.27,  $p$  < .03.



- 4) The more time paramedics reported working with paramedic partners ( $M$ = 55.28) versus EMT-B partners ( $M$ = 27.58), the more social support they perceived,  $r(99)$ = .36,  $p$  < .0001.



## Conclusions

- ❖ Overall, paramedics prefer working with paramedic partners versus EMT-B partners.
- ❖ Having a paramedic partner enhances perceived social support, increases the opportunity to administer ALS care simultaneously, and decreases the chance of overlooking vital observations.
- ❖ In addition, working with a preferred partner lowers stress levels.
- ❖ Knowing the factors that contribute to paramedics' preference for working with other paramedics allows management to better maximize their resources, to ensure the highest quality of patient care, and to safeguard the well-being of their employees.
- ❖ Future studies should investigate the extent to which working with a preferred EMS partner affects the patient care delivered. Further research should also make distinctions to determine which system is better depending on the call-volume of the service.

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