#1592: Mixed Samples as Probes for Unsupervised Model Selection in Domain Adaptation

Table 1: Additional MixVal ablation results and justification of novelty over SND and Entropy. **'Entropy+SND'** refers to the combination of both methods, where we average their rankings for model selection. **Notation correspondence with Figure 3**: 'MixVal-Inter' ('RankInter'), 'MixVal-Intra' ('RankIntra'), and 'MixVal' ('RankAvg'). **Conclusions**: (*i*) The two-dimensional probing enhances validation stability compared to single probing types. (*ii*) MixVal is distinctly different from and significantly outperforms the combination of SND and Entropy.

Method	closed-set UDA on *DomainNet*		partial-set UDA on *Office-Home*	
	ATDOC [25]	BNM [22]	PADA [15]	SAFN [21]
Entropy [44]	62.16	61.00	55.56	70.08
SND [27]	60.69	54.45	61.27	69.55
Entropy+SND	62.16	56.26	61.27	70.52
MixVal-Inter (Ours)	68.14	**66.30**	66.54	71.13
MixVal-Intra (Ours)	68.18	66.24	66.48	71.09
MixVal (Ours)	**68.26**	**66.30**	**67.57**	**71.41**
Worst	58.87	54.23	51.46	63.63
Best	68.90	66.34	69.83	72.03

Table 2: Validation results of another popular **open-partial-set UDA method OVANet** on the Pr→Re task. We validate the loss coefficient λ, which is the only hyperparameter specific to OVANet. The default value is 0.1. We consider values in $\{0.001, 0.003, 0.01, 0.03, 0.1, 0.3, 1.0, 3.0, 10.0\}$.

Method	OVANet [ICCV2021]
Entropy [44]	76.93
InfoMax [26]	76.53
SND [27]	76.93
Corr-C [45]	82.89
MixVal (Ours)	**84.96**
Worst	76.53
Best	85.45

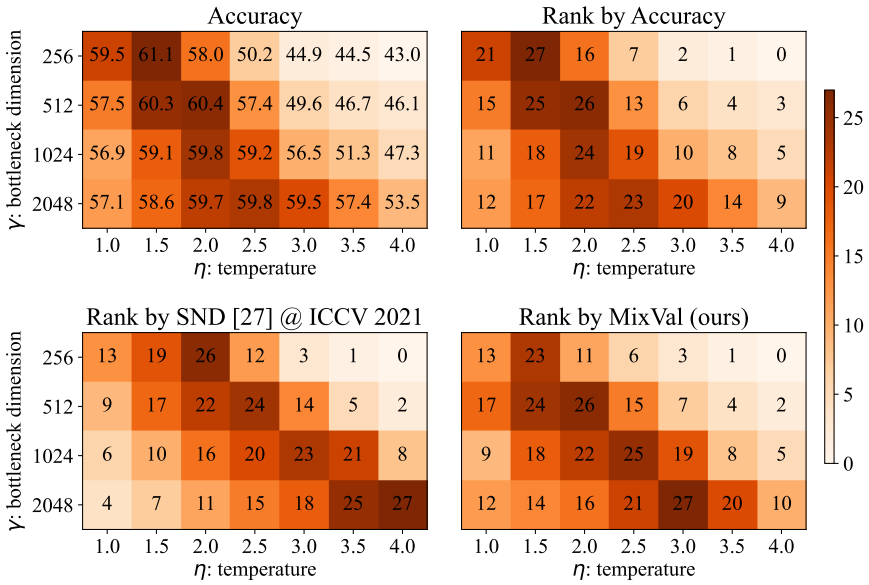

Figure 1: **Improved Figure 2 (b)** to prevent potential misunderstandings and confusion.