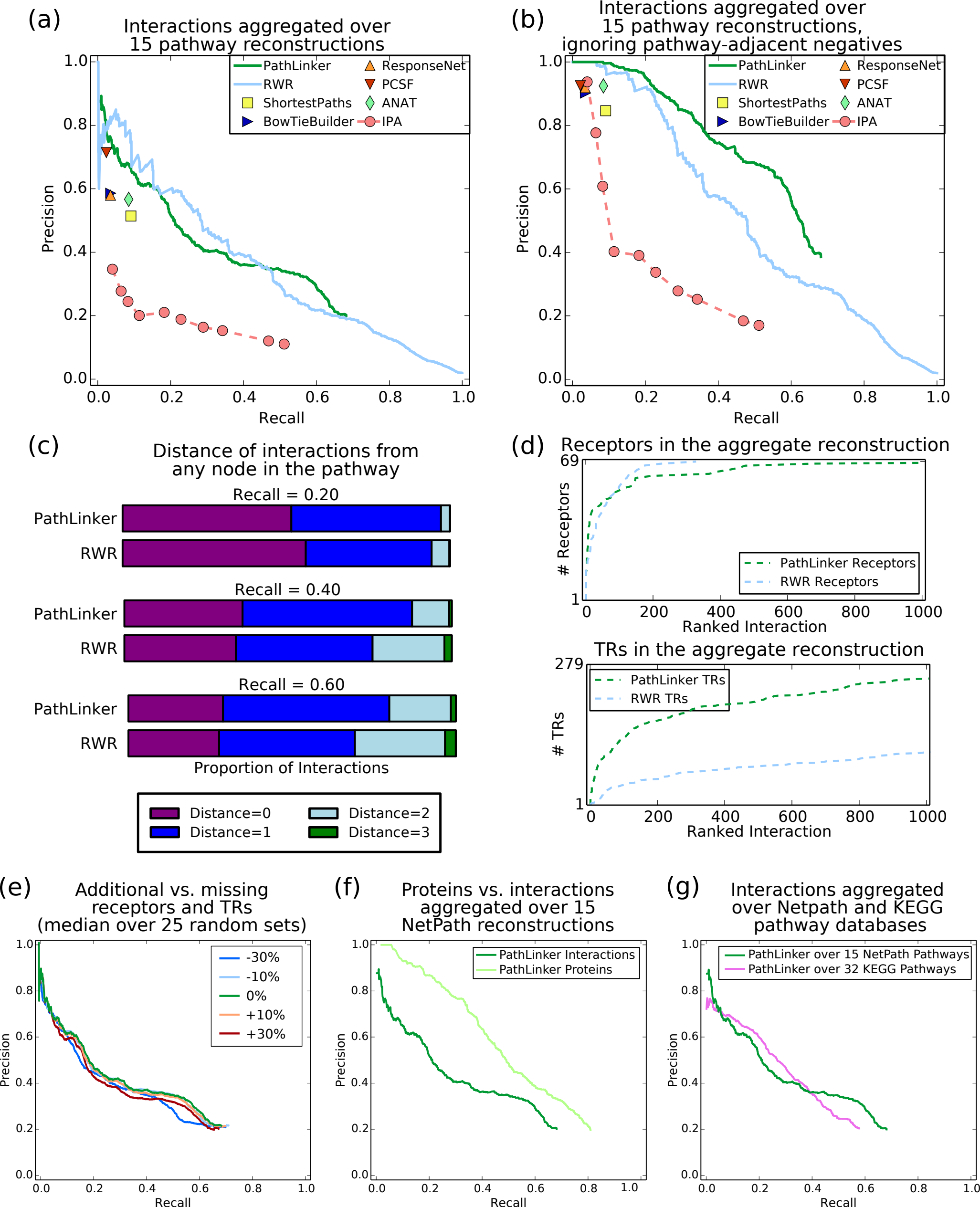
(a)
Interactions aggregated over 15 pathway reconstructions
PathLinker
RWR
ShortestPaths
BowTieBuilder
ResponseNet
PCSF
ANAT
IPA
Precision
Recall
(b)
Interactions aggregated over 15 pathway reconstructions, ignoring pathway-adjacent negatives
(c)
Distance of interactions from any node in the pathway
Recall = 0.20
Recall = 0.40
Recall = 0.60
Proportion of Interactions
Distance=0
Distance=1
Distance=2
Distance=3
(d)
Receptors in the aggregate reconstruction
Receptors
PathLinker Receptors
RWR Receptors
Ranked Interaction
TRs in the aggregate reconstruction
TRs
PathLinker TRs
RWR TRs
(e)
Additional vs. missing receptors and TRs (median over 25 random sets)
-30%
-10%
0%
+10%
+30%
(f)
Proteins vs. interactions aggregated over 15 NetPath reconstructions
PathLinker Interactions
PathLinker Proteins
(g)
Interactions aggregated over Netpath and KEGG pathway databases
PathLinker over 15 NetPath Pathways
PathLinker over 32 KEGG Pathways