The present study was conducted to investigate the relationship between aggression and social information processing styles among children with popular and rejected social status group. The total sample was of 503 children of Government Schools between the age range of 9 to 12 years. Two groups comprising 92 aggressive rejected and 73 nonaggressive popular children were extracted from the sample on the basis of their scores on two subscales (Aggression and Prosocial Behavior Scales) of Teacher Checklist of Social Behavior (TCL-Urdu version) and peer sociometric nominations. Urdu version of Social Problem Solving (SPS) stories with adapted pictures and video (consisted on adapted 12 social situations) were used to assess social information processing styles in aggressive rejected and nonaggressive popular children. The findings revealed significant differences among aggressive and nonaggressive children on aggression, prosocial behavior and social status group. Aggressive children were lacking prosocial behavior and faced peer rejection as compared to nonaggressive children. Furthermore, aggressive rejected children differed significantly from nonaggressive popular children on social information processing styles. Aggressive rejected children were inaccurate in detecting peer intention cues and less attentive to relevant social cues. Similarly, aggressive rejected children made hostile attributions to the intent of peers in ambiguous social situations and selected aggressive goals rather than prosocial goals to solve their problems. Differences were also found in enactment skills and endorsement of aggressive, inept, and competent responses to a problem between aggressive rejected and nonaggressive popular children.