Study	Dependent Variable(s)	Confounding Variable(s)	Data Set	Analysis	Results
Li and Henry, 1993	Maintainability (measured by LOC changed)	None factored in	Two commercial systems written in Classic-Ada	Linear Regression	Concludes that NOC, LCOM, RFC, WMC, DIT all predict maintenance efforts beyond what can be predicted for size alone.
Basili et al., 1996	Fault-proneness	None factored in	Eight student projects written in C++	Univariate linear regression. Multivariate logistic regression	Finds that LCOM is not a significant predictor of fault-proneness while the remainder of the CK metrics are.
Harrison et al., 1998	Size (LOC), testability (time to create automated tests), changeability (time to implement modifications), understandability (Boehm measures)	None factored in	Five small projects written in C++	Correlation analysis	No results on DIT and NOC as no inheritance in data set. Negative correlation between WMC and the time to create automated tests for software. WMC was found to be negatively correlated with understandability. Both WMC and LCOM were negatively correlated with changeability.
Tang et al., 1999	Fault-proneness	None factored in	Three small/medium commercial systems written in C++	Logistic regression	RFC and WMC strong predictors for fault-proneness
Emam et al., 1999	Fault-proneness	Class size (LOC)	One medium-sized commercial project	Logistic regression	After controlling for size, only CBO was an indicator of fault-proneness
Cartwright and Shepperd, 2000	Fault-proneness	None factored in	One large commercial project	Linear regression	Found the inheriting classes were more defect prone (identified as classes having a DIT or NOC > 0)
Subramanyam and Krishnan, 2003	Fault-proneness	None factored in	One large commercial project written in C++ and Java	Linear regression	CBO, DIT, WMC predictive of fault-proneness
Elish and Rine, 2003	Stability	None factored in	Three medium-sized FLOSS projects written in Java	Correlation analysis	CBO, DIT, LCOM, RFC, and WMC (particularly CBO and RFC) were all found to be negatively correlated with stability.
Bruntink et al., 2006	Testability	None factored in	Five medium/large-sized projects written in Java	Correlation analysis	Using the lines of test code and the number of test cases in the unit tests as a proxy for testability, they find that only DIT and NOC are predictors of testability.
Xu et al., 2008	Fault-proneness	Class size (LOC)	One medium-sized government project written in C++	Neural networks	CBO, RFC and WMC are reliable metrics for defect estimation finding that overall
Badri et al., 2011	Testability	None factored in	Two medium-sized FLOSS projects written in Java	Correlation analysis and logistic regression	Found a correlation between LCOM and unit test coverage, validating the use of OO metrics as a predictor of the testability of classes
Malhotra and Jain, 2012	Fault-proneness	None factored in	One medium/large-sized FLOSS project written in Java	Logistic regression and machine learning techniques	Machine learning models comparable in performance to linear models. Found that CBO, LCOM, RFC and WMC not to be significant predictors of fault-proneness. The rest of the CK metrics were indicators.
Saberwal et al., 2013	Bad code smells (binary determination)	None factored in	One medium-sized FLOSS project written in Java	Logistic regression	RFC, LCOM, NOC and WMC found to be useful predictors of bad code smells.